

MEXICO BEFORE CORTÉZ

J. ERIC THOMPSON

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Mexico before Cortez



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MEXICO BEFORE CORTEZ



Photograph by courtesy of Gordon C. Abbott

FEATHERED SERPENT DECORATION, TEMPLE OF QUETZALCOATL, TEOTIHUACAN

MEXICO BEFORE CORTEZ

AN ACCOUNT OF THE DAILY LIFE,
RELIGION, AND RITUAL OF THE AZTECS
AND KINDRED PEOPLES

BY

J. ERIC THOMPSON

IN CHARGE OF CENTRAL AND SOUTH AMERICAN ARCHÆOLOGY
FIELD MUSEUM, CHICAGO

CO-AUTHOR WITH THOMAS GANN OF "THE HISTORY OF THE MAYAS"

CHARLES SCRIBNER'S SONS
NEW YORK & LONDON

1937

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PREFACE

IN this short account of daily life, religion, and ritual as it existed in Mexico before the Spanish conquest I have tried, as far as possible, to avoid technical terms, lists of tribal designations, and detailed descriptions of archæological work. In this connection the term *Mexican*, as used in this book, should be defined. It is here used to describe the Aztecs, the Texcocans, and other tribes of the Valley of Mexico and adjacent regions who possessed the same general culture with minor local variations. It does not cover Oaxaca, Vera Cruz, Michoacan, and other regions where local culture varied to a greater degree from that of the Aztecs. Less attention is paid to these areas in this book, partly from lack of information from early sources, partly from lack of space.

T. A. Joyce's excellent book *Mexican Archæology* is now out of print, but for the benefit of those who have had the fortune of reading or possessing a copy, I have tried to make this book to a certain extent complementary to his. This has been achieved by outlining in detail certain ethnological customs to which he paid little attention, and, on the other hand, stressing little the archæological aspects fully developed in his book. Naturally, a considerable amount of duplication cannot be avoided, for we have both, perforce, syphoned off much literary wine from casks of the same sixteenth- and seventeenth-century vintages.

PREFACE

Aztec names have a somewhat terrifying aspect, but are actually easy to pronounce. X has a Sh sound; Qu, following Spanish custom, has a K sound; Hu and Gu before a vowel have a W sound; while all vowels are pronounced as in Spanish. For example, Xochicalco (Shohecalco); Quetzalcoatl (Kaytzalcoatl); Huehue-teotl (Waywaytayotl).

I am greatly indebted to Field Museum of Natural History, Chicago, for generous permission to illustrate this book with many pieces from the museum's Mexican collections. Through the courtesy of the trustees of the British Museum and Captain T. A. Joyce, deputy keeper of Ceramics and Ethnography of that museum, I am able to reproduce the mosaic mask shown on Plate X. Doctor Robert Redfield, of the University of Chicago, kindly supplied the print of Xochicalco pyramid, while I owe thanks to the Mexican Ministry of Education for the use of the photograph of the pyramid at Tajin.

Mr. Gordon C. Abbott and Professor Charles J. Chamberlain, both of Chicago, placed at my disposal their wonderful collections of photographs of Teotihuacan and Mitla. I owe a deep debt of gratitude to both of them for their kind co-operation. Finally, without the tedious tracings from codices made by my wife this book would have been impossible:

J. ERIC THOMPSON.

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MEXICO BEFORE CORTEZ

CHAPTER I

A HISTORICAL OUTLINE

Man Did Not Originate in the New World. Early Man Associated with Extinct Fauna. First Immigrants via the Behring Straits. Physical Appearance. Mexico as a Cradle of Civilization. Agriculture and Invention. The "Archaic" Cultures. Teotihuacan Period. The Toltecs. Fresh Immigrants. Aztec Migrations and Early History. Foundation of Mexico City. Independence. Imperial Expansion under Various Rulers. The Autocracy of Montezuma. Coming of Cortez and the Fall of the Aztec Confederation.

LITTLE is known about the earliest man in America, but at least it is certain that man did not originate in the New World. There are no anthropoid apes on this continent from which he could have developed. Furthermore, no primitive types, such as Neanderthal or earlier races, have ever been found on American soil. All human remains so far found in the New World clearly belong to *Homo sapiens*, and in addition can be placed without any serious question in the specialized American-Indian race.

Until a few years ago archæologists were of the opinion that the first immigrants had reached the shores of America some ten or fifteen thousand years ago. It was generally held that these first inhabitants had crossed over into Alaska from Asia via the Behring Straits during and subsequent to the glacial periods.

In the last four or five years important discoveries

have been made that may lead to an upward revision of this estimate. The most important of these was made by Mr. M. R. Harrington of the Southwest Museum of Los Angeles. At Gypsum Cave in southern Nevada he has recently discovered remarkable associations of man with supposedly Tertiary fauna. The upper deposits revealed remains of modern Indians, while below were found typical remains of the Pueblo peoples of a thousand years ago and traces of the basket-makers, who preceded them. Below these were thick deposits carrying no human remains. Under these again were two thick bands of sloth dung, and below this the remains of two camp fires, in one of which sloth dung had been used as fuel. Other chambers of the cave revealed bones of the sloth, an extinct species, as well as remains of extinct horses and the American camel, a llama-like animal, but not directly associated with human remains. Nevertheless spear-thrower shafts painted green and red were found far below the sloth-dung levels. With the remains of this extinct fauna, however, were found the bones of mountain sheep and other animals still in existence.

Additional evidence from other localities would seem to confirm the Gypsum Cave finds. At Folsom in New Mexico bison of an extinct species have been found with peculiar points of stone mixed with the bones, and even imbedded in the bones in one case. Few tail bones were found among the forty skeletons, suggesting that the skins were removed with the tails attached after

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the slaughter of the herd. The soil above the remains is believed to have been deposited near the close of the Pleistocene period. The peculiar grooved well-made points are different from anything else previously reported from America.

Spear-points of the Folsom type have even been found in apparent association with mastodon bones in Illinois, but the most sensational discoveries of this nature were made a few years ago in Ecuador. There a well-preserved mastodon was found in apparently clear association with man. Several fires had been lighted around where he lay, for the soil showed clear marks of having been burned at the edge of where the body lay. Furthermore, some of the mastodon's bones were also partly burned. Close at hand were sherds of polychrome pottery, which the discoverers believed belonged to the slayers of the mastodon. Doctor Max Uhle, the first man to carry out scientific excavations in Peru, was present during part of the excavations, and has expressed his conviction of the correctness of the deductions.

Doctor Duncan Strong of the Bureau of American Ethnology reports folk-lore and legends among the Naskapi Indians of Labrador that seem to be memories of the time when man hunted the mastodon in America.

The evidence indicates either that man has lived longer in the New World than was previously supposed, or that various animals, such as the giant sloth, American camel, and mastodon, which were believed

to have become extinct in Tertiary times, actually lingered on in favorable parts of the New World until quite recent times. Perhaps it would be best to accept a compromise between these two possibilities until further evidence is available. On this assumption the arrival of man in the New World should be pushed back to, say, twenty thousand years ago.

Of the physical appearance of these first Americans we have little or no knowledge. Actually all human remains found in the New World belong to the same general American Indian group, although certain skulls from eastern Brazil and other parts of South America represent a primitive proto-American Indian group. The American Indians form part of the Mongoloid race, of which the Chinese are another division. The American Indians are not of Chinese descent, but both races originally came of the same stock, and this is evidence that the American Indian is descended from immigrants who crossed from Asia. We are probably correct in assuming a constant dribble of immigrants passing over the Behring Straits from Asia for many centuries.

In the course of centuries the new arrivals spread over North America, seeped down into Mexico, and even passed into South America, populating the whole continent in the course of centuries. America's first inhabitants were on a low plane of culture, possessing no knowledge of agriculture, weaving, pottery making or metals. Their food they obtained by hunting, collecting

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wild roots, berries and clams, and by fishing. For hunting they employed the spear-thrower, a very ancient weapon, which still survives in two or three parts of Mexico, but later immigrants probably introduced the bow and arrow. Half-tamed dogs, also of Old World origin, were man's companions and helped him in his hunting.

Clothing consisted of skins in the colder climates, and simple necklaces of shells or seeds were almost certainly worn for adornment. Baskets, too, were in all probability woven from the earliest times, but the polishing of stone axes was due to later immigrants from Asia. Fire was made with a wooden drill of the same type as that used by the Aztecs until the arrival of the Spaniards. (Plate XVI.)

Organized religion was still in the future, but there was probably a well-developed magic competing with animism for supremacy. We can deduce the existence of men who practised as shamans or sorcerers in their spare time, gradually developing a reputation for the cure of sickness by magical methods.

We can be certain that life wasn't so free and easy as that of the caveman is popularly supposed to have been. Family life was probably fairly well developed with descent through the father. Monogamy was probably the rule with occasional communal promiscuity during special ceremonies or moments of tribal crisis. It is to be doubted if ladies were clubbed and dragged off by the dominant male to any greater extent than women

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are abducted in automobiles at the present time, since communal discipline was possibly stricter then than it is to-day, and all the members of a family would have been held responsible for the crime of one of their number. Nevertheless, life must have been harsh owing to man's precarious domination of nature. In the course of many centuries the scattered groups undoubtedly diverged linguistically. The number of languages would also have been increased by the later immigrants from Asia.

In the course of centuries the descendants of the first groups, who had drifted down to Mexico, increased in numbers to a certain point, but the population could never have become dense under such conditions, since hunting communities require a much greater area for their support than equally numerous agricultural peoples would find necessary.

In Mexico or Guatemala the first discovery of agriculture in North America was made. One might ask as to whether there were any reasons why this should have taken place in this area rather than in any other locality?

A cross-section of central or south Mexico is like the layout of a giant coaster track. One starts on the west coast at sea level, and climbs steeply into the mountains after a short run along the narrow coastal plains. After laboriously climbing to the greatest height, one sweeps down in a short rush into the plateau country of central Mexico. A series of short ups and downs follows for some time until one is nearing the eastern

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coast. Suddenly the plateau ends, the giant coaster drops from under your feet, your heart jumps into your mouth, and before you know what has happened you are running along on the low level of the Atlantic plains, and the ride is over.

Actually the real journey is much better than a ride in a giant coaster, for you have kaleidoscopic changes of scenery and climate. You start in the hot humid lands of the *tierra caliente*—a wonderful climate for all kinds of tropical produce. You climb up into an area of snow-clad peaks. Then there is a short drop into the plateau country, a land suitable for every kind of subtropical produce. It is cold enough to make you wrap a blanket round yourself in the early morning, but pleasantly warm during practically the whole year. In short, it is the ideal summer resort of that favorite character of fiction—the tired business man. There is another short climb at the edge of the plateau followed by one great swoop down into the climate you started with. The coast is very unpleasant in summer, but an ideal place to bask in during the winter months.

We have no reason to believe that the ancient Mexican of some 10,000 years ago had different tastes in climate from those of our hypothetical business man. He probably enjoyed basking in the heat of the lowlands during winter, and relaxing in the coolness of the plateau country in summer just as much as we do. Probably more so, since his clothing and shelters were inferior to ours.

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With such ideal conditions within a small area it would not have been strange if central and southern Mexico became overcrowded for hunting peoples, who required a great deal of territory to live in comparative ease. Such was probably the situation in this area between five and ten thousand years ago. The original population had increased until living conditions were becoming uncomfortable despite the richness of the country. The invention of agriculture eased the pressure.

On the plateau country grew a wild grass known to the Aztecs as *Teocentli*, or "food of the gods." This was an apt name, for from it either by chance, or, more probably, by deliberate effort, maize was produced.

Probably this came about through the germination of seed accidentally spilt out of the baskets of its gatherers, or by faulty winnowing. Once the idea of planting seeds, instead of making long journeys in search of places where the plants grew wild, was taken up, selection of seeds would soon follow. This was the greatest stride ever made by man along the path of progress, for the cultivators were practically freed from the menace of starvation. The danger of overpopulation had practically disappeared, as now a much greater population could be maintained in the same extent of territory. By communal labor in the fields and the need for communal protection of the crops, the individual lost much of his independence and was welded more firmly into the community. This meant the emergence of civic organization.

could be heard at distances of several miles. The second type of drum was upright, standing on three wooden legs and with its mouth covered with deer hide or occasionally snake skin. (Plate VII.) The outsides of both kinds of drums were elaborately carved. Animal figures, gods and religious scenes were frequently depicted.

Four-fingered flutes of bamboo or pottery were also used. Those of pottery were sometimes carved with human heads or other devices. Smaller whistles with two-finger holes were much used, and are found in large quantities in Aztec deposits. They generally carry conventionalized birds in low relief. The Mexicans possessed no string instruments with the possible exception of the musical bow. This simple instrument with a gourd resonator is used at the present time in many parts of Middle America, but may be of African origin.

The carapaces of turtles were beaten with antlers, and rasps were made from the cores of conch shells or by notching human bones, preferably femurs. The sound was produced by rubbing a stick or antler along their surfaces. Conch shells with their tips sawn off served as trumpets, the sound carrying a very long distance. Smaller univalve shells strung on strings were worn on the legs and arms, producing a pleasant sound as they jingled together when their wearer danced.

The same effect was produced by small clapperless bells worn in a similar manner (see p. 94). These were usually of copper, but occasionally of gold. More in the nature of curiosities were whistling jars of the same

type as those found in the Late Chimu horizon of ancient Peru. In Mexico these were never common as in Peru. The vessels have two compartments joined by a narrow passage. As the water is poured out through the spout, air, rushing into the second compartment through a very small intake, causes the whistling sound. The same effect is also produced by swishing the water from one compartment to another.

Simple whistles were also manufactured to imitate the calls of deer and other wild animals. These were used by hunters to decoy game.

It can be seen that the range of musical instruments was very restricted. Indeed, the Aztecs, like most American Indians, were not a musical nation. The modern Indians of middle America have, however, taken to the marimba, an importation from Africa, with great gusto, until now it has become the national musical instrument of Guatemala and to a certain extent of Mexico as well. No examples of ancient music have survived, but we have translations of a number of poems or hymns of a religious or historical nature. In many cases these reveal a high standard of poetic imagery such as would be expected from a people so devoted to oratory. Unfortunately many of them are couched in metaphorical language, containing so many obscure references of a symbolic or religious nature, that they have little meaning for us.

Although many of the traditions and historical events sung at dances and festivals were transmitted orally,

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Finally leisure was born. With the eternal struggle for food in the hand-to-mouth existence of a hunting and seed-gathering community this had been impossible. With the introduction of agriculture it became possible to raise enough food by the labor of a few months to last the whole year, and while some of the group were raising food others were set free for other pursuits. In the train of leisure came numerous inventions. The old tag that necessity is the mother of invention is not strictly true. One invention leads to another, and in a comparatively short time other plants, such as beans and squashes, were domesticated. The art of pottery-making was learned, and out of basket-making developed weaving. The materials for weaving were at first coarse fibres such as those of plants of the agave family, but later cotton was developed in the lowlands.

To this cultural horizon belong the basket-makers of our own Southwest and the cultures that immediately followed. A similar culture doubtlessly existed all through middle America at about the time pottery was being invented. No definite trace of it has been found in this region owing to the damp climate which militates against the survival of such perishable objects as baskets, woodwork or woven materials, whether of cotton or yucca fibres. Nevertheless excavations in the drier climate of northern Mexico have revealed its existence.

From this culture doubtlessly developed the civilizations known in middle America as "Archaic." This is a misnomer, since the cultures were well developed and

show every evidence of sophistication. A very long interval must have elapsed between this basket-maker horizon and the earliest division of the "Archaic" so far reported.

Some twenty years ago excavations in the Valley of Mexico revealed, below deposits many feet deep, objects which were of considerably more primitive technique than the Aztec and Teotihuacan-Toltec pieces found in the overlying strata. This early culture was misnamed "Archaic" because of its crudeness in comparison with the objects of the later periods. In some cases deposits of the "Archaic" were buried under lava flows, which effectively sealed them off from the other periods. The discovery of pottery and small pottery figurines of the Teotihuacan-Toltec and Aztec periods above the lava clinched the argument. Such conditions are to be seen at Copilco, a suburb of Mexico City, where, owing to the careful work of Mexican archæologists, visitors may pass through electrically lit tunnels below the lava. There they can see the skeletons of these people lying just as they were buried. This lava flow can not be dated with any certainty, but it would appear to be quite late—perhaps not over 1500 years old.

The "Archaic" actually embraces a number of different cultures that followed each other in succession, some of them widely distributed, others, apparently, confined to small areas. Some of the successive phases show a complete break with the past, representing invasions of new cultures, and possibly culture bearers.



Courtesy of Field Museum, Chicago

PLATE I. CARVED STONE "PALMA," VERA CRUZ

A HISTORICAL OUTLINE

Doctor George Vaillant, of the American Museum of Natural History, has during the past three or four years carried out very thorough excavations at two sites in the Valley of Mexico. He suggests five divisions in the pre-Teotihuacan culture in the Valley of Mexico as the result of his work at two sites. Work at other sites, which he is now undertaking, may well cause him to increase this number, since he is still at an early stage of his investigations, and his conclusions are, perforce, tentative.

Even now the earliest recognized stage, which Doctor Vaillant calls Early Zacatenco from the place where he first established its position in the sequence, shows every sign of being a culture already well developed. It is far removed from the basket-maker horizon—the earliest known in the United States outside of the scant finds of the Folsom and Gypsum Cave horizons. Doubtless other finds will reveal cultures earlier than the Early Zacatenco.

A detailed discussion of archæological finds is outside the scope of this book, nevertheless a short description of the Early Zacatenco culture as reconstructed by Doctor Vaillant from his finds is not out of place in giving us an insight into the earliest civilization yet recognized in Mexico.

The Early Zacatencans made good pottery of a variety of shapes. Although most of the vessels were of simple red, black, or white, decoration in more than one color is met with, as well as occasional incised de-

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signs. Simple geometric designs in white on red are fairly common, and pleasant shallow white bowls supported on small teat-like feet are also represented with fair frequency.

Small pottery figurines hand-modelled, often with considerable feeling and skill, are found on this horizon. They differ in style from those of later periods. Much may be learned from their examination. Many of them, for instance, wear very complicated turbans. The way these are arranged strongly suggests that they were of cotton, since they appear to show more pliability than maguey fibre possesses. The wearing of ear-plugs, necklaces, bracelets, and anklets is shown by their occurrence on figurines of this period.

One tiny fragment of textile was found inside a skull. This appears to have been of henequen, but traces of a white substance found around corpses may have been a bark bast or a maguey fibre. The burials were found in shallow graves about four or five feet below the surface; the bodies had been buried in all kinds of positions, but the legs were usually extended.

Tools were made of bone, antler, obsidian, and probably quartz. Obsidian arrow-heads, probably refined by the technique known as pressure flaking, indicate that the bow and arrow were in use, but occasional lance points suggest that spears, probably propelled by spear-throwers, were also used. Obsidian was also used to make knife flakes of the type shown on Plate XI. Spindle-whorls of pottery bear out the evidence for the

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use of textiles at this time, and pottery whistles show that music had probably advanced almost as far as it had at the time of the conquest, so far as the range of instruments was concerned. Numerous grinding stones of lava indicate the cultivation of maize.

Houses were probably made of adobe, and settlements were located on high ground close to the shores of the lake. Occasional pottery vessels of non-local ware and decoration show that trade existed. Naturally, little can be gathered about the religious beliefs of the Early Zacatencans. The fact that all the pottery figurines are female would suggest that they were used in some fertility rites in connection with the crops, possibly representing a goddess of the earth and vegetation, some kind of a progenitress of the goddesses of the soil, crops, and rain to be described in Chapter V. The lack of any other objects that seem to point to religious observances would suggest that organized religion was not very advanced. Later we shall see that Mexican religion in the fifteenth century was an amalgamation of a simple agricultural cult with concepts derived from sacerdotalism and the imposition of a warrior class.

Such in brief is the culture of the Early Zacatencans. It was succeeded by others, displaying a somewhat higher level of attainment. In the succeeding period trade had developed to a marked extent. Imports included shells from the Pacific Ocean, jade, presumably from the Guerrero-Oaxaca region, and painted pottery, apparently from the east coast regions. Metals were unknown.

The fifth period, called by Doctor Vaillant Late Ticoman, shows many new features not met with in the earliest period. Stone sculpture occurs and pottery incense burners are used. Pottery vessels and figurines are more elaborate, and beautifully carved pottery ear-plugs with their surfaces painted red, appear during this last period. Pottery seals are also occasionally found, and cinnabar is in use, either as a paint or as the source of quicksilver.

Indicative of the advance in organized religion is a well-made pyramid discovered some years ago at Cuicuilco, near Mexico City. This also had been covered by the lava flow, only the upper half projecting above the sea of rock. Excavation of this pyramid below the lava level revealed only figurines of this Late Ticoman period, thereby tying it in with this horizon. Furthermore excavation revealed that the pyramid had already been abandoned and was crumbling away when it was partly sealed in by the flow, suggesting that the flow is not of great age.

The presence of a pyramidal structure of considerable size indicates that the communities were already well organized with a centralized worship and a well developed system of communal labor. It is, of course, absurd to label such a culture as archaic, but the word serves in a book of this nature, where the average reader would be little interested in the more elaborate nomenclature of archæologists.

The next culture to appear in the Valley of Mexico

is the Teotihuacan-Toltec, named from the site of San Juan Teotihuacan where it is particularly richly represented. The early and middle stages of this civilization were contemporaneous with the later phases of the "Archaic," such as the Cuicuilco pyramid, but it did not appear in the Valley of Mexico until after the close of Late Ticoman, although, possibly, it flourished for a long time before its appearance in the valley.

With Teotihuacan-Toltec straight archæology makes its first tentative contacts with the shadowy outlines of early Mexican history, as its name implies. The Teotihuacan represents the archæology, Toltec is a concession to nebulous tradition. The word *Toltec* was used by the Aztecs and other late inhabitants of the plateau land to describe their predecessors, the supposed builders of a high civilization—Mexico's golden age. The word itself means skilled worker, and was applied by the Aztecs to their predecessors because of their legendary skill as workers of turquoise and jade mosaics and decorated featherwork.

The traditional capital of the Toltecs was Tula or Tollan, a ruin in the state of Hidalgo north of the Valley of Mexico. Here are to be found extensive archæological remains of a high order. Unfortunately, practically no excavation has been carried out here, and there is no information as to whether the pottery and artifacts there resemble those of Teotihuacan. The architecture of the two sites is very distinct, but it is possible that this is so because only late buildings are known

at Tula. Surface finds there have revealed columns in the shape of feathered serpents and Atlantean figures, the upraised hands of which supported altars or roofs. Nothing comparable has been found at Teotihuacan.

This, by itself, would suggest that there was originally little or no connection between the peoples of Tula and Teotihuacan. History records that the Toltecs spoke a Nahuatl (Mexican language of the Aztec group), but in contradictory statements it is also claimed that the inhabitants of Teotihuacan were non-Nahuatl speaking Otomies.

It is possible that the so-called Toltec Empire was a federation of a number of communities of diverse race and speech, such as formed the Aztec confederation at a later date. In that case Tula may have been the civil capital with Teotihuacan as the principal religious centre and cultural head of the Valley of Mexico section of the federation. Teotihuacan culture, as represented by pottery and mold-made figurines, covered practically the whole Federal District with extensions in the directions of Puebla and southern Hidalgo.

Much in Teotihuacan civilization suggests that it was to a considerable extent molded by influences from the south. This is in accordance with tradition, if one accepts Teotihuacan as a part of the Toltec federation. Tradition relates that the Toltecs were responsible for the introduction of the working of metals, mosaics and precious feathers.

There is no doubt that metallurgy spread up from

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southern Central America into the Maya-Mexican area. Mosaic working, too, was probably of southern origin, since the jade employed came from the Oaxaca-Guerrero region, while the turquoise, an object of special veneration, was probably first mined in the Vera Cruz region. By precious feathers are usually understood those of the quetzal bird, which is only found in the western Maya country. The names of several of the day signs, also, are those of animals that are found only in the hot lowlands of the south.

Metal working certainly did not reach Mexico before the close of the ninth century of our era. The twelfth century is a more likely date for its introduction. A very fine Maya jade plaque found at Teotihuacan helps a little to date this culture. It was probably manufactured in the eighth or ninth century, and a second Maya trade piece found at Tula is of about the same date, or slightly earlier, to judge by the head-dress. This piece is carved on mother of pearl, and is now in Field Museum. These lines of evidence check in well with the traditional dates of Toltec influence, for its fall is generally placed in the twelfth century, and its rise some four hundred years earlier.

Peculiarly enough no hieroglyphic inscriptions have as yet been reported from Teotihuacan, but there is little doubt that the Toltec horizon possessed the calendar. It is possible that dates were modelled in stucco, which has crumbled away.

Early Spanish historians give lists of Toltec "kings,"

but these are unreliable, the names of the rulers, the length of their reigns and their sequence varying from one account to another.

There is one man who stands out against this background of confusion, although he, too, emerges a shadowy character in floodlights fogged by contradiction. This was Quetzalcoatl, possibly the last Toltec ruler. Quetzalcoatl, which means Quetzal bird-serpent, was also the name of an important Mexican deity (p. 157), whose name was borne by the Toltec high priests, who were in turn temporal rulers.

Great confusion has naturally ensued, for the acts of god and individual are inextricably confused. Finally, it is quite possible that the actions of other Toltec rulers also bearing the name of the feathered serpent god have been transferred to the last ruler.

Quetzalcoatl was supposed to have introduced culture to the pre-Aztec peoples, and he is credited with a great number of inventions, which certainly were not made at the same time. He was said to have been white-skinned and bearded. A bearded white culture bearer figures in the legendary history of many peoples of the New World outside of the Toltecs, and it does not seem unlikely that this concept is of considerable antiquity, antedating by a very long period the rise of the Toltecs. At the same time there is usually a fire to account for the smoke clouds of history.

Toltec civilization was doubtlessly at its height during Quetzalcoatl's rulership. The possible introduction



Courtesy of Field Museum, Chicago

PLATE II. AZTEC POTTERY FIGURINES, VALLEY OF MEXICO

Top, left to right: God Xipe; model of a temple; God Quetzalcoatl as Ecatl. Below, left to right: Goddess Xochiquetzal; Ecatl on a pyramid; Goddess Cuacuauatl with child

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of metals and growing imports at about this time may have been an added cause for attributing the prowess of the legendary leader to the actual ruler.

The wide commerce carried on at this time with distant peoples is typified by the account of Quetzalcoatl's residence at Tula. This, legend relates, consisted of four rooms. One was decorated with gold, the second had walls covered with jade and turquoise mosaics, the third was enhanced with motifs worked in sea shells, while the fourth had walls of red sandstone inlaid with shells. Sea shells, one must remember, were highly prized by all primitive inland peoples, and furthermore a conch shell in cross-section was the special symbol of Quetzalcoatl himself. Hence the decoration was very appropriate. Doubtlessly this account has not lost in the telling. It reflects the attitude of the later inhabitants of the Mexican plateau toward the earlier civilization.

Over and over again the world's history has recorded the destruction of great civilizations at the hands of more virile invaders. The Mexican plateau was no exception to the rule. The Toltecs with centuries of settled existence, devoted to the accumulation of wealth with its consequential introduction of softness, were no match for the new arrivals hardened by wandering through the barren wastes of northern Mexico. The Toltec federation fell as Rome had fallen, but like Rome succeeded in passing on much of her culture to her conquerors.

Legend typifies the overthrow of the older civiliza-

tion as a series of struggles between Tezcatlipoca, chief god of the invading peoples, and Quetzalcoatl, patron deity of the Toltecs. By means of sorcery and general trickery Tezcatlipoca overthrows Quetzalcoatl, and the Toltecs like helpless sheep were herded to their death. History relates that these invaders from the north were next door to barbarians, but modern opinion grants the new arrivals a fair degree of culture. It is practically certain that the newcomers were Nahua-speaking.

With the destruction of the Toltec federation, the component peoples relapsed into independence. The remnants of the Nahua-speaking Toltecs appear to have gathered at Cholula and in the territory of Tlaxcala with other settlements in the direction of the east side of Lake Texcoco, probably amalgamating with the original inhabitants. If the Toltecs were, indeed, Otomi-speaking, the change to the Nahua language probably took place at this time in the south, while in the general direction of Tula they would seem to have retained their own language. This theory, however, conflicts with the statement of early Spanish chroniclers that the Otomies were not on a particularly high cultural level.

The new arrivals, known as Chichimecs, or Acolhua, settled in various parts of the Valley of Mexico and surrounding country, doubtlessly mingling with the earlier inhabitants of the late "Archaic" horizon, whose distinctive culture lingered on well into the Teotihuacan horizon.

A number of important city states rose to prominence.

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Of these Azcapotzalco, Colhuacan, Texcoco and Tlaco-pan were to play an important part in Aztec affairs. Probably all of these sites had been already occupied for many centuries before the arrival of the Chichimec invaders. The next arrivals were the Aztecs.

There are fairly detailed accounts of Aztec history starting from a legendary emergence from underground at a place called Seven Caves up to the Spanish conquest. Naturally the later events chronicled are closer to actual history than are those of the early stages. The starting point of Aztec migration is said to have been the north. This agrees well with linguistic evidence, for the Nahuatl tongue, spoken by both Chichimecs and Aztecs, belongs to the Shoshonean linguistic group still spoken by Indian groups as far north as Montana and Oregon.)

Aztec tradition is also correct in recording the Aztecs as having migrated from their original habitat in the company of other Nahuatl-speaking tribes. Perhaps a thousand years elapsed between the departure of the tribe from the northern regions, and its arrival in the Valley of Mexico. Apparently the migration passed down the west coast of Mexico, for the Aztecs were reported to have passed through Michoacan. The inhabitants of this area are also Nahuatl-speaking, and Aztec tradition supplies an amusing explanation of the origin of this Nahuatl group.

During their wanderings the Aztecs arrived at the shores of Lake Patzcuaro. Some of the tribe thought this was a suitable place where they should settle, but

the oracle of Huitzilopochtli, the tribal god, ordered them to continue the journey. The members of the party opposed to the continuance of the march happened to be bathing in the lake. The oracle told the rest of the tribe to steal the clothes of the bathers and to continue on their way without more delay. When the bathers left the water they were unable to find their clothing. Ashamed to pursue their fellow tribesmen in the garb of nature, they decided to remain where they were. From these nudists, tradition relates, are descended the Nahuatl-speaking Tarascans, who still live in the vicinity of Lake Patzcuaro.

The lot of the faint-hearted was hard. Later the Aztecs are said to have resided for some time at Coatepec near Tula. Again some of the tribe wished to disobey Huitzilopochtli's orders to continue the march. One morning these persons were found with their breasts cut open and their hearts plucked out. From this, legend relates, originated the custom of human sacrifice in the peculiar Mexican method of removing the heart.

About the beginning of the thirteenth century the Aztecs settled at Chapultepec, where the modern Mexican presidential palace is situated. Apparently they intended to settle permanently at this spot, but the Tepanecs of Azcapotzalco and the Chalcans attacked them. The Aztecs were disastrously defeated. Their leader Huitzilihuitl was taken prisoner, and subsequently put to death at Colhuacan, probably as a sacrificial victim.

After more wanderings, the defeated Aztecs peti-

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tioned the ruler of Colhuacan for land on which to make a permanent settlement. They were granted land at Tizapan. This was a barren rattlesnake-infested area, where the Colhuacan leader believed they could not prosper, but were apparently out of harm's way. In the ensuing years they lived on friendly terms with the Colhuacans, trading and intermarrying with them.

The settlement advanced. Tradition relates that the Aztecs petitioned the Colhuacan leader for one of his daughters to become their ruler and goddess. The ruler consented, but the Aztecs slew the girl, and flaying her, dressed one of their warriors in her skin. The Colhuacan ruler, unaware of this outrage, visited the Aztec settlement, taking offerings to the temple. On realizing that in the darkness of the temple he had made his offerings to a warrior clad in his daughter's skin, he collected his followers to avenge the wrong. In the ensuing battle the Aztecs were again defeated, but were able to retire in good order to Acatzintlan, where they reformed their ranks and settled down once more. Later they moved to Tenochtitlan, the present Mexico City. The glyph for this town was a cactus plant (*nochtli*) growing from a rock (*tetl*), the last syllable *tlán* having the meaning of "The place of."

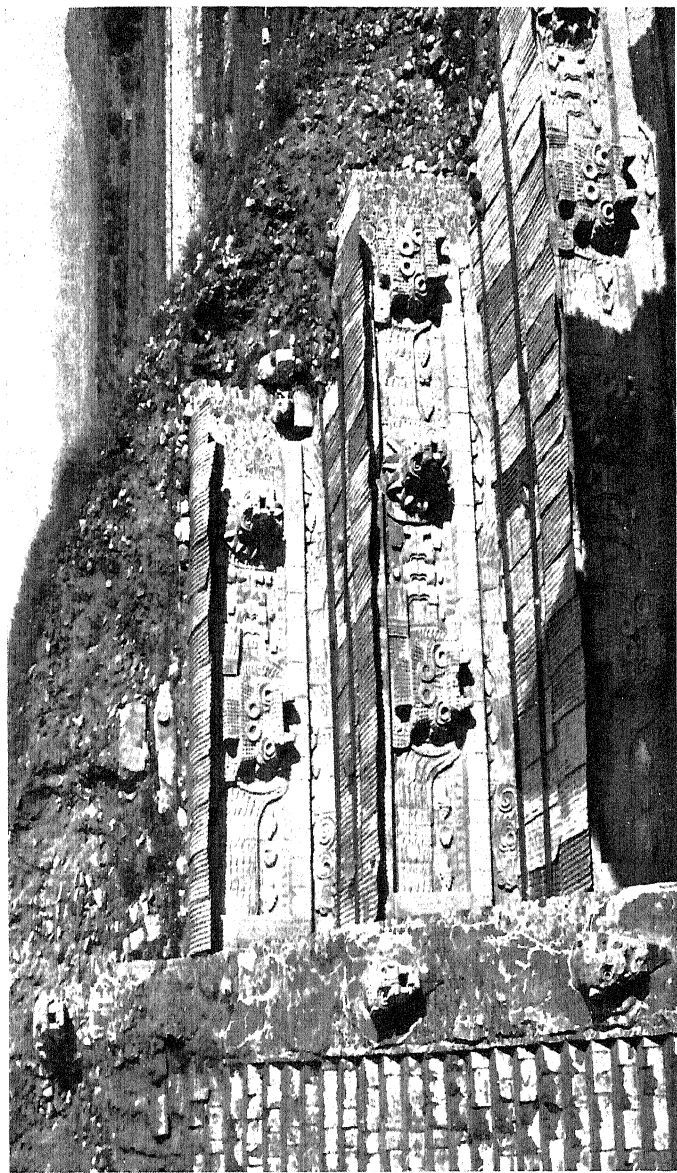
The settlement of Tenochtitlan took place in the year 1 Tecpatl, corresponding to A.D. 1324 in our calendar. The land was little suitable for settlement, being mostly swamp, and the original settlement, apparently, consisted of pile buildings standing in the water. The Az-

tecs were still a weak tribe in comparison with their neighbors, and doubtlessly they were forced to make the best of land their neighbors wouldn't trouble to occupy. Tenochtitlan, or Mexico City as it will be called in this book, was situated between the territories of Azcapotzalco and Texcoco, but tribute was paid to the former city.

One of the first tasks that faced the settlers was the erection of a suitable temple to house their tribal god, Huitzilopochtli. Suitable building materials did not exist in their swampy territory. They surmounted this difficulty by trading the products of the lake, such as fish, water fowl, frogs and aquatic beetles for stone, lime and hard wood. With the aid of these materials they were able to erect a fairly presentable pyramid crowned with the temple of their deity.

In the year A.D. 1375, that is fifty-one years after the foundation of their new city, the Aztecs decided to elect a chief ruler. The choice fell on Acamapichtli, whose mother was a daughter of the Colhuacan ruler, but whose father was Aztec.

This was a good move since the alliance with the Colhuacans was thereby strengthened to offset dangers from Azcapotzalco and Texcoco. At the same time it gave the Aztec rulers a pedigree, for the Colhuacan rulers claimed descent from the old Toltec rulers. Probably this pedigree was not of such great importance at that time as it subsequently assumed, but all the political *nouveaux riches* appear to have been desirous of a Toltec



Photograph by courtesy of Gordon C. Abbott

PLATE III. QUETZALCOATL PYRAMID AT TEOTIHUACAN SHOWING FEATHERED
SERPENTS, RAIN GOD MASKS AND SHELL DECORATIVE ELEMENTS

ancestry. This could be obtained by marriage or a judicially falsified pedigree.

Acamapichtli served as ruler until his death twenty-one years later. During this period the Aztecs seem to have successfully kept out of wars. Two decades of peace must have permitted a considerable increase of population and an added feeling of security. Although the Aztecs did not apparently start any wars of their own, there is some reason to believe that they aided the Colhuacans in one or two campaigns. Xochimilco was attacked and destroyed as a result of this aid from the Aztecs. An alliance of kinds was also made with the Chalcans, it would seem, since one of Acamapichtli's daughters was married to the ruler of Chalco. Nevertheless the Aztecs were still very weak, and found themselves forced to pay greater tribute to Azcapotzalco than formerly.

In 1396 on the death of Acamapichtli, his son Huitzilhuítl was chosen by the council of elders to succeed to the rulership. According to one account he was the fourth son of Acamapichtli. Huitzilhuítl married a daughter of the ruler of Azcapotzalco, as a result of which the tribute formerly paid by the Aztecs was reduced to a nominal payment of two ducks and a few fish and frogs each year. An alliance seems to have been concluded with the people of Azcapotzalco, and in the second decade of the fifteenth century the Aztecs took part in the overthrow of Texcoco by their new allies.

Huitzilhuítl died in 1417. His son, Chimalpopoca,

was elected to succeed him. Chimalpopoca was at this time a mere boy of ten or eleven years of age. One imagines that this election must have been the result of pressure from Azcapotzalco, or a desire on the part of the Aztecs to keep in with a city state of such importance. Otherwise it is not conceivable that the Aztec council of elders would have chosen a mere boy as their leader, since it was not necessary that a son should succeed his father. Probably the election of Huitzilhuítl to cement the alliance with the Colhuacans, and the subsequent election of Chimalpopoca, because he was the grandson of the ruler of Azcapotzalco, set the custom of electing the ruler from one particular family. It is more than probable that had no political reasons existed for the election of these two rulers, the subsequent Aztec rulers would have been drawn from any family, their election depending entirely on ability, instead of ability within one family. According to one account, however, Chimalpopoca was the brother, not the son, of Huitzilhuítl.

It was during his rule that the successful campaign was waged against Texcoco. It is also stated that at this time water was first brought from Chapultepec by means of an aqueduct. The first aqueduct was made of pottery. This proved useless, whereupon the Aztecs requested stone and lime from the people of Azcapotzalco. The request was refused, and relations between the Aztecs and the Azcapotzalco became very strained. Finally a party of the latter either assassinated Chimalpopoca,

or arranged for a group of disaffected Aztecs to commit the murder. This occurred in the year 1427.

Itzcoatl, a son of Acamapichtli by a slave woman, was elected to the rulership to succeed Chimalpopoca. War was pending with Azcapotzalco, and many of the Aztecs were in favor of making peace on any conditions with their powerful neighbors. However, Azcapotzalco was engaged at this time in a life-and-death struggle with Texcoco. The Aztecs, under Itzcoatl, wisely threw in their lot with the Texcocans. In the subsequent fighting Texcoco with Aztec aid destroyed the power of Azcapotzalco once and for all, crushing also Colhuacan, the second great Tecpanec centre. Another campaign by the Texcocans and their allies the Aztecs led to the conquest of Xochimilco for the second time. Tlacopan, a smaller city apparently peopled by Chichimecs, was admitted to the Texcoco-Aztec alliance at about this time.

The three city states were to remain in alliance from this time until the Spanish conquest. Spoils of war were divided between the three tribes, two-fifths going to Texcoco, two-fifths to the Aztecs, and the last fifth falling to Tlacopan. Gradually the Aztecs ousted Texcoco from the leadership of the federation, probably because of their greater skill as fighters.

On the death of Itzcoatl in 1440 Montezuma the elder was elected ruler. He was the son of Huitzilhuitl, the second ruler, and a nephew of Itzcoatl. Like his predecessor, Montezuma I was an aggressive fighter.

Under his leadership the federation carried on war for the first time outside the Valley of Mexico. Cuernavaca was subdued in the course of one of these campaigns. An attempt was even made to reduce the Mixtecs and Zapotecs of Oaxaca, but this was a difficult proposition. The allies were, apparently, successful in their efforts to conquer these peoples, but their permanent subjection was more difficult. After the withdrawal of the invading armies, the distant towns promptly revolted, refusing to continue the payments of tribute.

The rule of Montezuma the elder was a turning point in Aztec history. His predecessor had thrown off the yoke of Azcapotzalco, but now the Aztecs were embarked on a period of imperialistic expansion, which only the coming of the Spaniards stopped. Other expeditions invaded the territory of the Huastecs in the direction of the Panuco River, the Totonac territory of Vera Cruz, and the southern part of Guerrero, where the Cohuixca were supreme.

Axayacatl, apparently Montezuma's son, succeeded him in 1471. He also was an energetic and warlike ruler. The campaigns against the Totonacs were continued, and the Tarascan territory of Michoacan was invaded. The Tarascans were an extremely warlike people, and, repulsing the invasion, inflicted a very severe defeat on the Aztecs. Prior to this Axayacatl had waged a successful campaign against the Tehuantepecs, obtaining prisoners for his induction ceremony, and penetrating as far as Guatusco, a town on the Pacific coast not far from

the present Guatemalan frontier. At about the same time the people of Tlatilolco, Aztecs who had broken away from Tenochtitlan during its early history, were reduced to submission.

In 1481 Axayacatl died, and his brother Tizoc was elected to succeed him. His first campaign to obtain prisoners for the inauguration ceremonies was a failure, since he and his forces were unable to defeat the people of Metztitlan in Hidalgo and their Huastec allies. The Huastecs were considered to be very poor fighters, and the capture of a Huastec prisoner was not reckoned a particularly brave feat. Hence a repulse at their hands was a poor start for Tizoc. Two years after his election he started to enlarge the great pyramid and temple of Huitzilopochtli, which had already been enlarged under Montezuma the First. A campaign against the Matlatzincas of the Toluca Valley supplied a large number of prisoners to be sacrificed in connection with this pious work. Tizoc appears to have been more interested in such matters than fighting, with the result that he has been dubbed a coward. This is probably an unjust accusation. After having enjoyed the post of ruler for only five years Tizoc died a victim of poison. His death was said to have been plotted by certain nobles who either resented his inactivity, or had some personal grudge against him. Saville is of the opinion that he was poisoned by eating noxious mushrooms which had been substituted for those usually eaten at certain ceremonies to produce hallucinations (p. 74). Ahuitzol, his brother,

was elected in his place in the same year of 1486. He has been described as one of the most virile figures in Aztec history. One Aztec codex states that at the dedication of the enlarged temple structure, which was completed in 1487, no less than 20,000 prisoners of war were sacrificed. This number is probably an exaggeration, nevertheless a series of brilliant campaigns would be necessary to reach a quarter of this number. By a series of well-executed campaigns Ahuitzol consolidated the Aztec federation, forcing the outlying peoples, on whom the Aztec yoke had sat lightly, to pay regular tribute. Aztec rule in such far-away regions as Oaxaca was effectually consolidated, for in the past tribute had usually ceased soon after the withdrawal of the Aztec and allied armies.

Michoacan and Tlaxcala were the two provinces that retained their complete independence. In the case of the latter, the Aztecs claimed that they did not want to subdue its inhabitants entirely. The Tlaxcalans were a small and warlike people, and the Aztecs waged frequent wars against them to obtain prisoners for sacrifice and to train the young braves, and for that reason did not desire their submission. This, at least, was their version, but it may have been a case of sour grapes.

In 1502 Ahuitzol died. His son, Montezuma the Second, was elected to be chief ruler. The choice of the council of elders and electors was unfortunate. He was imbued with ideas of class distinction more in line with those of an absolute monarch than with the social usages



Courtesy of Field Museum, Chicago.

PLATE IV. POTTERY FIGURINES OF WEST COAST TYPE

They resemble somewhat those of the "Archaic" periods in the Valley of Mexico, but date from shortly before the Spanish conquest.

of the Aztecs during the first century of their occupation of Mexico City. He appears to have wished to rid himself of the control of the council of old men and clan chiefs, administering the empire without their advice or consent. All persons who were not of the ruling caste were dismissed from positions of importance, and replaced, apparently, by sycophants.

Had Montezuma been a man of more resolution, all might have been well. Unfortunately he was the victim of a more than usually superstitious complex combined with a tendency to procrastination. When Cortez appeared in Mexico, he might have been overwhelmingly defeated at the start of the campaign. Montezuma, swayed by irresolution and superstitious fear, allowed him to gain allies through his delay in attacking him. Later vacillating between policies of conciliation or open war Montezuma disheartened his own followers by half-hearted defense, eventually allowing himself to become Cortez' prisoner. Had he followed the example of his predecessors and subordinated Aztec policy to the advice of the council of leaders and elders, a resolute resistance would probably have staved off the Spanish conquest for some years.

Eventually he was deposed, but by then the damage had been done. Aztec prestige had suffered so many blows, that many of the peoples composing the empire revolted or refused to fight the Spaniards. What might have been done at the beginning was demonstrated by the resolution with which the Spaniards were attacked

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during their retreat from Mexico City, but then it was too late. Spanish reinforcements had arrived, and the Tlaxcalan alliance was firmly cemented. The fall of the Aztec confederation was pitiable.

CHAPTER II

THE CYCLE OF LIFE

Birth. Ceremonious Customs. Lucky and Unlucky Days. Natal Feast. Naming. Weaning. Punishments. Education. Boys' Colleges. Novices. Warrior Rank. Marriages by Arrangement. Marriage Ceremonies. Girls' Colleges. Polygamy Among the Nobility. Divorce. Death. Future Life. Journey to Underworld. Funerary Ceremonies. Cremation. Slaying of Widows and Slaves. Succession. Guardians for Orphans.

THE ancient Mexicans, like all peoples whose life centred round agriculture, were desirous of having large families to help them with their farm work. The birth of a child, particularly if it was a son, was the occasion of many ceremonies to propitiate the deities and assure a happy future for the new arrival.

For the accouchement a bed of straw was prepared in front of the hearth, where a special fire was lit. Under no circumstance was this fire allowed to go out until four days after the birth, and no visitor was allowed to remove any of its embers from the house. However, it was customary for friends to rub their knees with ashes from this fire, for it was believed that the infant's bones

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would thereby be strengthened. If the mother had difficulty in giving birth, she was given a decoction of opossum tails to drink, possibly because of the ease with which this animal raises its young—an interesting case of sympathetic magic.

Immediately after birth the child was washed by the midwife, who prayed to Chalchihuitlicue, goddess of water, for its happiness. After swaddling the child, the midwife addressed it in the following pessimistic terms: "Child, more precious than anything, Ometecuhtli and Omecihuatl created you in the twelfth heaven to come to this world and be born here. Know then that this world, which you have entered, is sad, doleful and full of hard toil and unhappiness. It is a valley of tears, and as you grow up in it you must earn your sustenance with your own hands and at the cost of much sorrow."

After this cheerful welcome, the baby was placed in its mother's arms with a few words of praise to her for her fortitude. Soon after this, a priest-astrologer was summoned to declare the child's fortune. This depended on the day in the sacred calendar on which it had been born. Some days were lucky, some unlucky, and yet others indifferent. The day 1 Cipactli, for instance, was very lucky. Boys born on this day had a prosperous future in front of them. If of noble family they would prove to be great leaders and the owners of much property. If of humble birth they would be honest, brave and never in want. Similarly children born on 1 Acatl, or the following twelve days, would be traitorous or

given to the practice of witchcraft. Unhappy was the fate of those born on one of the thirteen days starting at 1 Calli. If they did not die a violent death in battle or as sacrificial victims, they stood a good chance of being caught in adultery, and suffering death as a punishment. About the best they could hope for was to be forced by want to sell themselves into slavery.

Actually it was possible to avert impending ill-fate of this nature by a little manipulation. The most usual method of doing this was to postpone the ceremony held four days after birth to some later date when the fates were more auspicious.

Four days after birth the bed in front of the sacred fire was removed, and that night a great feast was held. Before the guests sat down to eat, the baby was passed over the sacred fire, and then its head was washed four times, four being the sacred number especially associated with men. Food and pulque wine were also sprinkled over the fire as an offering to the fire god, whose name meant "The old, old god." If the baby was a boy, toy weapons and implements of the kind he would use when he reached manhood were placed in his hands, and he was guided so as to go through the motions of using them in combat and work. In the same way miniature weaving and spinning implements were placed in the hands of a baby girl, and she was also made to go through the motions of grinding maize for tortillas. Similar ceremonies are still practised among the Mayas of Yucatan with the object of insuring that the children

will grow up into competent and hard-working members of the community.

The feast held in connection with these ceremonies was attended by all the friends and relations of the parents, both adults and children. The Mexicans, apparently, could never refrain from long speeches and platitudinizing, and an event, such as a birth, gave them a wonderful opportunity for long-winded discourses. The baby was again informed that he had entered a vale of tears, and sorrow would be his destiny. The other children present also addressed the baby, telling him, if he were a boy, to become a warrior so that he might die a soldier's death, thereby qualifying for the warrior's paradise. One would imagine that at celebrations of a birth so many references to death would be out of order, but the mortality of man seems never to have been far from the thoughts of the Aztecs, although death was not much feared. In modern Mexico one sees this same intimacy with death displayed in a hundred different aspects from the cemetery picnics on All Souls day to the innumerable folk drawings of dancing death.

Parents belonging to the nobility gave more elaborate feasts to celebrate the child's birth. Costly presents, such as embroidered cotton cloaks, were given to the guests, who topped off a great banquet of turkey by smoking tobacco in cane pipes.

Children were often named from the day on which they were born, especially if the birthday chanced to be of good augury. Frequently, too, a child was named

for some event that took place at the time of his birth. One of the leaders of Tlaxcala, for instance, was called "Smoking Star" because a large comet was prominent in the sky at the time of his birth. Boys were sometimes named after animals, or took the name of some ancestor; girls frequently bore the name of some flower.

Children were not usually weaned until they were almost three years old, but in this connection it must be remembered that the ancient Mexicans had no milk-giving domestic animal. From a very early age the training of the child was very strict. A common punishment consisted in thrashing the disobedient child with a species of stinging nettle. (Plate V.) Sometimes a refractory child was hung head downwards over a fire on which peppers had been lain, so that the acrid smoke went up his nostrils.

Incorrigible children might be sold into slavery as a last resort. Children, who were too prone to lie, were punished by having a piece cut out of one of their lips. With such strict training it is not strange that the Spaniards were astonished at the high moral tone of the natives, and their reluctance to tell a lie. Unfortunately contact between the two civilizations soon led to a rapid moral degeneration of the native code.

Boys of what might be termed the middle class, such as sons of merchants and small local chiefs, and the sons of the agricultural masses were handed over to special priests for education at about the age of six, or even earlier. They were lodged in special boys' houses in an

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organization which might be compared to a modern boarding school, save that the discipline in the Mexican schools was much stricter. Each geographical group, called a *calpulli*, had its own college, for these groups were clans which, in the course of centuries, had largely lost their bonds of consanguinity. The college was attached to the *calpulli* temple, and the instruction was in the hands of priests.

In addition to receiving an education, the boys were responsible for the maintenance of the temple and its services. Their duties included the sweeping of the temples, the care of the sacred fires and incense braziers, the beating of drums to summon the people to the temple services, the hewing of wood and drawing of water required in the religious exercises, the preparation of the paint with which the priests adorned themselves, and the cutting of the *maguey* thorns used in drawing blood in sacrifice.

Education included a very strict moral training, lessons in history and traditions, religious instruction, and a practical course in arts and crafts. There were twenty of these colleges, one for each of the *calpullis*. Their purpose was to turn out good citizens and good military material.

Another college existed for the education of the sons of the nobility. This was known as the *Calmecac*. Here the education was even stricter, and the discipline more rigid. The college was attached to the main temple group of Mexico City (*Tenochtitlan*), and its principal

was accorded very high rank. The boys were instructed with a view to their future positions as religious and military leaders of the community. They performed the same duties for the great temple of Huitzilopochtli (p. 225) as were performed by the youths of the other colleges in the temples of their respective calpullis.

Much more attention, however, was paid to their instruction in history and tradition, and physical training. During the whole period of the training, which varied from about six to eight years, the boys were under a very strict supervision. They slept in the college building, and, apparently, seldom saw their parents. They made frequent sacrifices of blood by piercing their ears, tongues and arms with maguey thorns, and at appropriate times fasted and kept vigil. A ceremony, in which they participated, is described elsewhere. Religion and warfare were so closely connected in ancient Mexico, that it is not strange to find young men to be dedicated to these two professions undergoing the same preliminary education.

Sometimes parents of rank would make a vow that if a sick child recovered from his illness, they would dedicate him to the priesthood. In that case a big banquet was held in honor of the priests, when the boy reached the age of ten. After this the parents took the child to the Calmecac, where he was presented to the god Quetzalcoatl, patron of the college. As part of the presentation, he was forced to listen to a moral discourse as long-winded as a Scott novel.

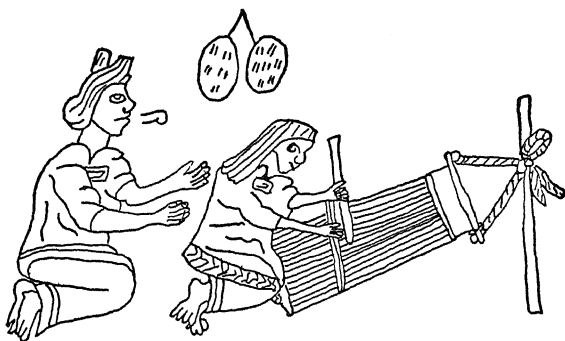
The achievement of warrior rank was the ambition of most members of the Calmecac. A young man might be said to have graduated when he was granted warrior's rank. Training in warfare began when the boy attained the age of fifteen, but concurrently with his general education. He continued to live in the training school, which served as a kind of bachelors' club. On reaching the age of twenty the initiate was considered fit to fight, but under the watchful eye of an old soldier, whose supervision had previously been obtained by presents from the boy's father. The objective of a Mexican warrior was not to kill as many of the enemy as possible, but to take captives, who would serve later as sacrificial victims, and this was the young soldier's ambition. Young boys wore a lock of hair down the back of the head, and the young soldier continued to do so until he had taken a prisoner in combat, either single-handed or with the aid of comrades. The cutting off of the pig-tail was, like the winning of his spurs by a knight, the occasion of great rejoicing and feasting among the young man's kith and kin.

A novice, who took a prisoner single-handed, was received by the Aztec ruler, and permitted to paint his body yellow and his face red with yellow markings on the temples. On the other hand a young man, who failed to take a captive single-handed in the course of several battles, was ignominiously returned to civil life, and branded as a coward. His disgrace followed him for the rest of his life, for he was marked off from the war-

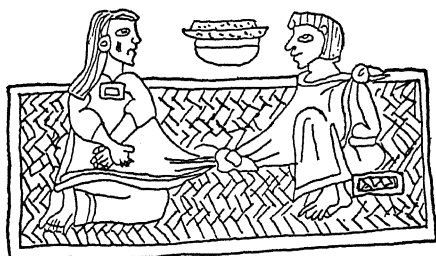
riors by not being permitted to wear cotton clothing or embroidered garments.

Once a young man had won glory in battle he was admitted into the ranks of adult society, and was free to marry. Among the masses an ability to earn his living was required of a young man before he could contemplate matrimony. There was little courting among the ancient Mexicans, marriages being arranged between the parents. Among the masses ability to cook and weave was considered of more importance than beauty. Frequently the young man indicated to his parents the girl he would like to marry.

The first task was to call a priest astrologer to decide whether such a marriage would prove felicitous. This he did by ascertaining the days on which both the young man and the girl were born, and computing whether such a combination was auspicious. If such were the case, the boy's parents sent certain old women as negotiators. These go-betweens visited the girl's parents or guardians, always arriving on their mission after midnight. Armed with a present, they made speeches, urging the desirability of the marriage. The girl's parents invariably replied that they could not then agree to the marriage, upon which the intermediaries departed, returning, however, a few days later to renew the suit. On this occasion they stated what property the young man possessed and what presents he was prepared to give the girl's parents. The girl was consulted by her parents, but, apparently, she was not expected to object unless



a



b



c

PLATE V. ADOLESCENCE

a, Teaching young girl to weave; b, Marriage ceremony; c, Punishing boy by pricking him with thorns. Mendoza Codex.

she had conceived a very strong dislike to her suitor. The final consent of the girl's parents was carried to the boy's family by other old women related to the girl's family.

The actual marriage ceremony took place at the bridegroom's house, the bride being brought there in a special litter with great pomp. The first ceremony consisted of the groom censuring the bride with copal incense and vice versa. After that the pair sat down on a reed mat, and exchanged garments, the groom giving the bride a woman's dress, and the bride giving him in return a man's clothing. Next the points of their cloaks were knotted together, and this symbolized the union. Food was served to the couple, and the new state was symbolized by the pair feeding each other. All the guests ate and drank, dancing after the feast. (Plate V.)

The newly married couple were expected to sit on the mat for four days. During this time they retained a grave mien, for this period was considered to be a vigil and time of repentance, during which they were forbidden to bathe or wash themselves. Maguey thorns were given them to draw blood from their tongues and ears, and at midnight they made offerings to the gods. At the end of this period the marriage was consummated, new clothes were given them, and they were ceremonially bathed by a priest. While the groom censured the household gods, the bride was decked in feather garments, white plumes being placed on her head and around her ankles and wrists. After this there was a fresh feast and

more dancing to bring the ceremonies to a final conclusion. Different parts of Mexico had different marriage customs. Among the Mixtecs of Oaxaca, for instance, the groom carried the bride to his house on his back. Among the Huastecs the husband did not speak to his wife's parents during the first year of married life.

Girls of the nobility and middle classes were prepared for married life by instruction in girls' schools patterned after those of the boys. They entered these at about the age of five, learning there to spin and weave, to prepare and cook meals, and to master other domestic arts. (Plate V.) Discipline, as among the boys, was very strict, and long periods of silence were imposed upon them. They were never allowed to leave the college precincts unless accompanied by an old woman, who served as chaperon. This rule was not relaxed even when exercising in the school gardens. Should they meet any one not connected with the school, they were forbidden to speak or even raise their eyes from the ground.

Punishment for infractions of these rules was severe. As in the case of their brothers, beatings with nettles were inflicted. For some offences the soles of their feet were pricked with maguey thorns, for others the ears were pricked in the same manner. Even daughters of the rulers were subjected to the same discipline.

These girls, too, served in the temples, one of their most important duties being to guard the sacred fires so that they were never extinguished and to make a daily food offering to the gods. As a corollary of these duties,

they ate only once a day, and meat was forbidden them save at religious feasts. When they first entered the college their hair was cut short, and they continued to serve until claimed in marriage. Needless to say no courting was possible under such conditions, for a young man who attempted to converse with the girls was liable to pay with his life for such temerity. Nevertheless, runaway love marriages were not by any means unknown.

Monogamy was the general rule, but persons of high rank often possessed many wives. In the Michoacan region of western Mexico a man married his mother-in-law should she become a widow. Similarly a man marrying a widow, older than himself, with a daughter, took the daughter as a second wife. Where polygamy existed among the nobility, the wives were separated, each possessing her own small dwelling close to her husband's house.

Divorce was not uncommon. Couples who had not made a success of their joint life appeared before the local judge, stating their troubles. The petitioner was almost invariably the man, for women were expected to make the best of a bad job. Grounds for separation were the idleness of the woman in her household tasks, barrenness or inability to cook, spin or weave. The judge heard both sides, and based his decision largely on whether the couple was legally married. When this was the case he did his best to compose the differences, pointing out that separation would bring disgrace on the

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parents who had arranged the marriage. If his efforts failed, he dismissed the pair, who were then free to separate. According to other authorities the judge himself pronounced the marriage dissolved. Were the couple not legally married a separation was more readily obtained.

Death, the close of life's cycle, was the occasion of a great many ceremonies. The Aztecs believed in three abodes of the dead. The most aristocratic of these was reserved for warriors slain in combat or on the sacrificial altar, and their feminine counterparts, women who had died in childbirth. Those lucky enough to qualify for this afterworld went to the sun. The men accompanied the sun, patron god of the warriors, in its daily course across the heavens, but only as far as the zenith. Thence to its setting it was accompanied by the women. After four years' residence in this solar paradise, the dead were converted into birds, particularly humming birds, and were free to fly down to earth. The humming bird is associated with the sun's sojourn on earth in Maya legend.

Tlalocan, the second abode of the dead, was situated on earth. This was the home of the Tlalocs, the principal rain gods. It was a land of happiness and contentment, replete, as one would expect in the home of agricultural gods, with fields of growing corn, squashes and beans. Suffering and pain were unknown in this land, but those who could enter this charming abode must first qualify by being drowned or being struck by light-

ning, deaths directly attributable to rain deities. However, those who had died of certain incurable skin diseases were also admitted, perhaps as a kind of compensation for their suffering on earth. Persons eligible for Tlalocan were not cremated, as was the general Aztec custom, but were interred in special burial places.

To the third abode of the dead went those that had died a natural death whether of noble or humble birth. This place was situated under the world's surface, and was known as Mictlan. Here ruled the Mexican equivalent of Pluto—Mictlantecutli and his spouse Mictecacihuatl. A corpse destined for this abode was addressed as follows: "Our son, you have finished with the sufferings and fatigues of this life. It has pleased our lord to take you away, for we have no eternal life in this world. Our existence is like the ray of the sun. It is short like the fleeting moments in winter when one warms oneself in the sun. Now has come the time for Mictlantecutli and Mictecacihuatl to take you to the abode that has already been arranged for you. . . . You must go to the land of shadows where there is no light or windows. You will never get away from there, and you must not worry about returning, for your absence will be eternal. . . ."

The journey that the deceased must make from this world to Mictlan was long and fraught with danger. First he had to pass between two mountains that were forever clashing against each other. Next he had to traverse a trail guarded by a monster snake and a croco-

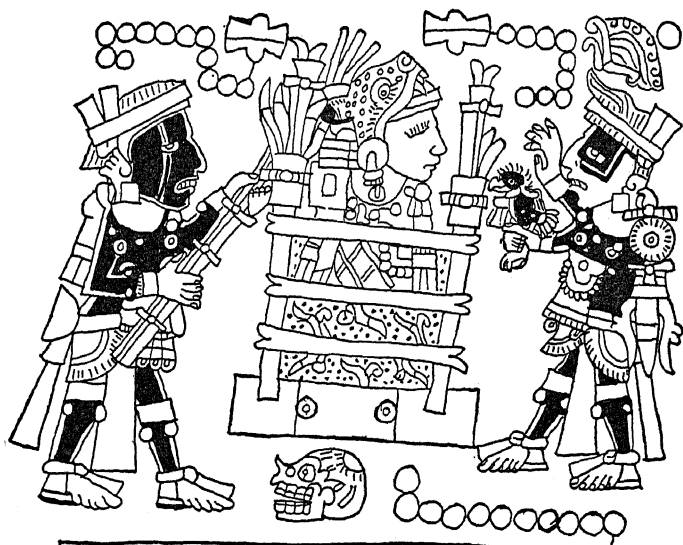


PLATE VI. CREMATION AND SACRIFICE

Above: Two priests in front of funerary pyre. One has a torch in his hand ready to set fire to the pile. The deceased wears a jaguar head-dress.

Below: Removing heart from sacrificial victim. Zouche Codex.

dile. Beyond lay eight deserts and a mountainous region known as Eight Hills. The next tribulation was a bitingly cold wind called the Wind of Knives, for it was so fierce that it tore up even the stones in the ground and cut like a razor.

The final obstacle was a great stretch of deep water, known as Eight Waters. Once this was crossed the deceased entered Mictlan, but four years had been consumed in the journey. Certain help was supplied the deceased by his mourners. Certain papers were cut out by the priests and given the deceased to aid him in his pilgrimage. All his clothes and arms were burned, for it was held that the heat engendered by their cremation would protect the deceased when he faced the Wind of Knives. With the deceased was buried a small vermilion dog with a cord of unspun cotton around its neck. The dog went straight to the far side of Eight Waters, where it awaited the arrival of its master, swimming across to meet him at the expiration of the four-year period. Riding on the dog's back with the cord to support himself, the deceased was able to cross the great sheet of water.

It was believed that only a vermilion-colored dog could help in this manner, for the white dogs excused themselves by saying that they were already washed, while the black dogs said that they were blemished by black markings, and for that reason could not pass their masters across. This belief still exists in some of the remoter parts of Mexico, but under the influence of

Christianity, the name of the stretch of water has been changed to the Jordan River.

Ceremonies at the death of a ruler were extremely elaborate. Torquemada has left a detailed account, which can be freely translated as follows:

"It was customary among the peoples of Mexico that when a ruler died, word of his death was carried with great solemnity to all the neighboring towns and to distant rulers related to the deceased. Warning was given of the time of burial, which was usually four or five days after death. When corruption started, the body was placed on specially worked mats, where it was guarded with great ceremonies until the arrival of the rulers invited to the burial. These brought presents of beautiful cloaks, green feathers and slaves, each according to his wealth, offering them for the burial ceremonies.

"Once the bidden guests were assembled, the corpse was dressed in fifteen or twenty rich cloaks, woven with many beautiful patterns, and adorned with gold and other jewelry of great value. Then a piece of jade, which the Indians call Chalchihuitl, was placed in the deceased's mouth, for it was said to serve as the deceased's heart. Locks of hair from the top of the dead ruler's head were removed, and placed with others, which had been cut from his head at birth, in a well-worked box of stone or wood carved on the inside with figures of their conception of the demon [Mictlantecutli?]. These locks of hair were kept as a memento of his birth and death. A painted mask was then placed

on the dead person, and a slave was slain. This was the slave who during life had served the dead ruler as chaplain, placing fire and incense on the altars and braziers, which the ruler had in his house. It was held that he was slain so that he could accompany his master to the next world, there to serve his master in the same duties.

"On the deceased were next placed the clothing of the principal god of the town, in the temple or chief house of which he was to be buried. The body was removed from the house with great solemnity, accompanied by the other rulers, relations, friends and the widows. All wept and mourned while the priests sang unaccompanied by drums. On arrival at the gate of the courtyard of the temple, the high priest and his assistants came forth to meet the procession. The deceased was placed at the foot of the staircase leading up to the temple, pitch pine, sprinkled with copal incense, was piled around and set alight. (Plate VI.)

"As the body burned and the gold ornaments and jewelry melted, large numbers of slaves, both men and women, were sacrificed. The number of these was sometimes as much as one hundred, sometimes two hundred, the number depending on the position and wealth of the deceased ruler. These were the personal slaves of the deceased or those presented by the guests. First the victims' breasts were opened and their hearts removed, as in the ordinary sacrifices, then their bodies were thrown on a funerary pyre, but not that on which the deceased

ruler was burning. Among those slain in this fashion were some of his wives, and the dwarfs, hunchbacks and deformed, who had kept the dead man amused in his palace. These were slain, it was said, so that they might solace their master in the next world, where he would be provided with another palace. . . .

“On the day following these foolish and superstitious practices, the ashes and any bones that had not been burned were collected and placed in the box in which the locks of hair had already been placed. The piece of jade, which had been placed in the corpse’s mouth to represent his heart, was also placed in the box. Over the box was placed a wooden statue of the deceased, decked in his clothing. In front of this the remaining widows and relations and friends made offerings. This ceremony was called *Quitonaltia*, which means ‘They give him good luck.’ For four days they paid him honor, and took offerings to the place where he had been burned. Indeed, many of them made the same offering twice daily, and repeated it in front of the box enclosing the hair and ashes. At the end of this period another ten or fifteen slaves were slain, for they said that at the end of four days the soul of the dead man began his march to the abode of the dead, and consequently he needed their aid. . . .

“Twenty days after the cremation four or five more slaves were sacrificed, and after another twenty days two or three more. Another twenty days later one or two more were slain, and finally eighty days after the

first ceremonies ten or twelve more were sacrificed.

"This last sacrifice was as though it were the end of the year, for after this no more humans were slain. Every year, however, a memorial service was held in front of the box. Rabbits, butterflies, partridges and other birds were sacrificed, and in front of the box and the statue over it were placed much incense, offerings of food and wine, many flowers and roses, and some tubes of cane containing fragrant things to smoke [tobacco], which they call *Acayetl*. (Plate VII.) These offerings were kept up for four years, and the participants feasted and drank until they fell intoxicated. They also danced and wept, calling to memory the death of the deceased."

The custom of slaying wives and slaves of the deceased had at one time or another an almost world-wide distribution. Torquemada also gives a long description of the death and cremation of the ruler of Michoacan in western Mexico. The ceremonies were similar to those already described, but he tells us that for five days after death no maize was ground in the city, no fires were lit, and the whole population remained at home, mourning their dead ruler.

For the common people the ceremonies were, naturally, very much more simple. The bodies were cremated unless the deceased had qualified for the paradise ruled over by the Tlalocs. Offerings of food were made as in the case of the rulers, and the simple possessions of the deceased were burned with him.

Among the Zapotecan peoples of Oaxaca the cre-

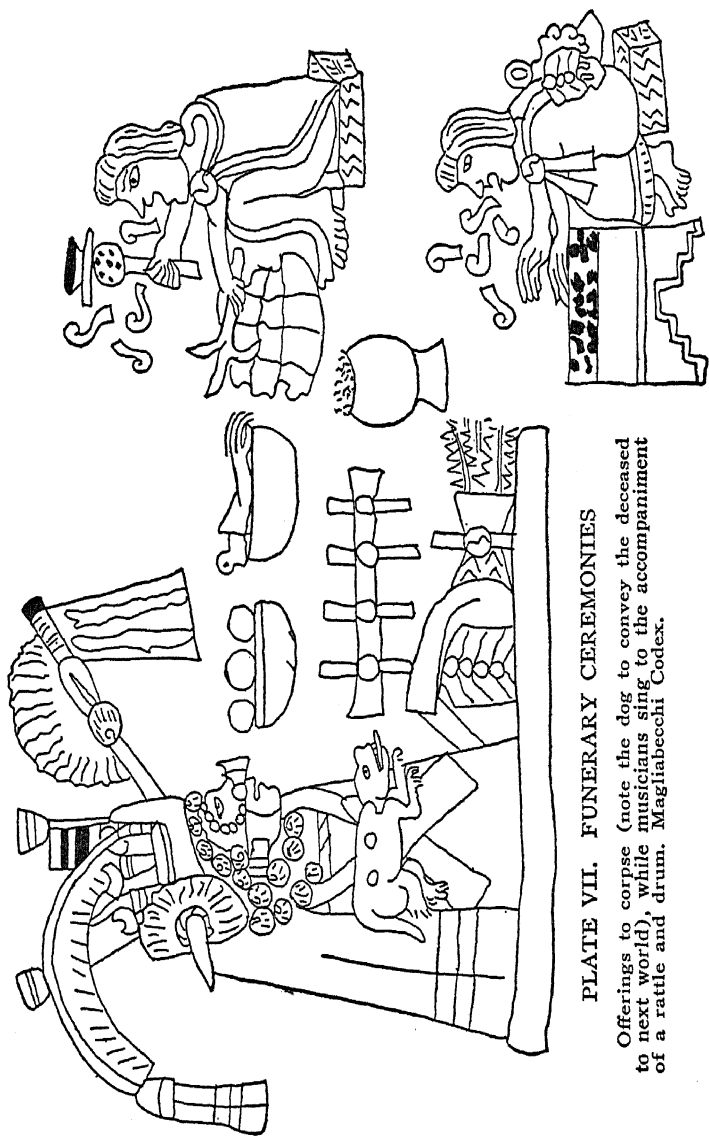


PLATE VII. FUNERARY CEREMONIES

Offerings to corpse (note the dog to convey the deceased to next world), while musicians sing to the accompaniment of a rattle and drum. Magliabecchi Codex.

mated ashes were placed in large funerary urns of pottery, on the front of which were modelled figures of the gods. (Plate XXIX.) Examples of these vessels are to be seen in almost all Mexican archæological collections. In this same area are also found large cruciform burial chambers, the walls of which are decorated with the geometrical mosaic patterns typical of this area. In the Colima district of western Mexico large well-made pottery dogs are frequently found with burials. It is not certain if these represent food offerings or the dogs slain at burials to accompany their masters to the next world. (Plate XIII.)

The eldest son of a ruler was not necessarily chosen to succeed his father. That depended on his ability. An elder son of little ability or fighting prowess might be passed over in favor of a younger son, and among the Aztecs themselves the brother of the dead ruler usually succeeded. Property usually passed to the eldest son, but he was expected to share it with the other children. Children of the masses inherited little from their fathers, for the land farmed by a man belonged to the community, and reverted to it on his death. Heirs who wasted the property that they had inherited were frequently put to death, since they did not appreciate what they had obtained from the sweat of the brow of another.

Guardians were appointed to look after the property of minors, and any dishonesty on their part was punished by death. In some of the remoter parts of Mexico,

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the son who inherited his father's property also inherited such of his father's widows as were childless, but this custom was not permitted among the Aztecs, who considered such a practice very reprehensible.

CHAPTER III

ARTS AND CRAFTS

Agriculture the Chief Industry. Communal Ownership of Land. Ceremonies at Sowing Time and at Harvest. Origin of Maize. Amaranth. Principal Agricultural Products. Cacao Beans used as Currency. Maguey Source of Intoxicant. Prohibition for the Young. Domesticated Dogs. Turkeys. Hunting and Fishing. Cooking. Cactus that Produced Hallucinations. Markets. Spinning and Weaving. Dress and Ornaments. Gold Working. Jade and Turquoise. Obsidian Knives. Featherwork. Wood Carving. Houses. Causeways. Canals. Bridges.

THE land, basis of Mexican civilization, was divided between three categories of owners. The first, and most important, was the *calpulli*, or geographical clan of which there were twenty in Mexico City at the time of the fall of the Aztec régime. Each *calpulli*, which comprised the inhabitants of a ward, owned a considerable amount of land in its district. Part of this was worked communally by all the men of the *calpulli* to provide tribute and for the upkeep of the temples, priests and religious services. The rest of the *calpulli*'s land, roughly corresponding to the *ejidos* of a modern Mexican village, was divided among the various families of the clan according to their requirements. Ownership remained in the name of the *calpulli*, and were the land assigned to any family to remain unworked for a period

of two years, it reverted to the community. In practice the land was to all intents and purposes the personal property of the family to which it had been assigned, passing from father to son. All the produce was the personal property of the cultivator, who was free to dispose of it as he wished, but he could not sell or transfer his rights to the land, and were a family to die out or to move to some other district, the land that had been assigned to it reverted to the calpulli.

In addition to the communally owned calpulli lands, members of the nobility and in particular relations of the rulers of the different communities possessed private estates which had been presented to them or their ancestors for services to the state. These estates normally passed from father to son, but they could be sold. Apparently the peasants in the neighborhood were under an obligation to aid in the harvests. The last category of owners was formed by the warrior class. The land they owned was situated in conquered territory. It was the Aztec custom to grant sections of the conquered territory to warriors who had taken a distinguished part in the war that had led to the incorporation of the new district into the Aztec commonwealth. In addition to serving as a reward for valor, such grants helped in the pacification of the new territories, and resulted in the planting of Aztec nuclei to guard against disaffection. These estates passed from father to son, but could not be alienated, for ownership remained in the hands of the Aztec ruler, and were the occupant to die childless,

the estate reverted to the state. Labor for such estates was, presumably, supplied by the conquered peoples in the vicinity.

In the comparatively treeless plateau country the soil was apparently prepared for sowing with hoes, for no plow existed in the New World before the arrival of the Spaniards. In the lowlands preparation of the soil was more laborious owing to the prevalence of dense tropical forest. This had to be removed before planting could start, and must have presented a very serious problem to the natives, who possessed no better tool than a stone ax. Actually the soil was largely cleared by girdling the larger trees with fire so that they would die. This work began at the commencement of the dry season in January. A month or six weeks later, when the felled trees and bush were sufficiently dry, the whole was fired, and the maize sowed in the resulting ash-covered soil. The planters passed up and down the field or milpa, as such a clearing is called all over Central America, making holes at intervals of about a yard, into which three or four grains of maize were thrown and then covered with a little earth kicked into the hole. The same method of preparing the milpas may be witnessed at the present time all over the *tierra caliente* of Mexico, Guatemala and Honduras. In many parts of Mexico it was the custom for groups of as many as twenty men to unite to aid each other in the task of preparing and sowing the crops. In the plateau land it was not generally necessary to clear the land by burn-

ing, but hoeing was necessary to keep the grass down.

The day of sowing was fixed by consultation with the soothsayers, who decided on an appropriate day after consultation of the *Tonalamatl* (p. 169). The seed was obtained from certain ears of corn of the previous harvest, which had been blessed in the temple of *Chicomecoatl* at the feast held in the month *Huei Totzozontli* (p. 180). The goddess *Chicomecoatl*, spirit of the corn, was apparently believed to lurk in these ears which had been hanging in the house since their blessing. On setting forth the sower begged the bag, in which the seed was carried, and the planting stick to help him in his work. Prayers were also made to the soil to yield a bountiful harvest. Sometimes the local priest was present at the sowing. Scattering some of the seed on the ground, he cried:

"I, the priest, the holy sorcerer, am present. Listen, sister seed, remember that you are our sustainer. And you, Your Highness the soil, now that I am entrusting into your hands my sister [the seed] who gives us our maintenance, take care that you do no wrong. Do not treat this as a light matter, and do not fall into sin by making fun of it. Beware that what I bid you do is not a matter for delay. I must see my sister [the seed], our maintenance, burst forth from the soil soon and without delay, and I wish to come with rejoicing to welcome my sister, our maintenance, at her birth."

This oration, which is somewhat freely translated, strikes one as being more in the nature of a command

than a prayer. The Tlalocs, gods of the rains, were also invoked at this time to guard the newly sown crop against any animals that might damage it. Seven or eight days after the plants appeared above ground, the owner again prayed to the Tlalocs, burning a candle of beeswax and offering copal incense. Again, when the ear started to form, a turkey was sacrificed and candles and copal offered to Chicomecoatl. Not even a leaf might be plucked until the silk appeared, but as soon as this was visible, a number of ears were plucked together with green leaves and the first flowers of maize, and carried to the granary, where with a turkey, copal and a candle, they were offered in sacrifice.

As soon as the green corn was ready for eating, some of it was carried to altars on the hill tops, and offered there. Fire was made in honor of Xiuhtecuitli, the fire god. The green ears were placed to roast on the fire, on which copal had been sprinkled. Some of the more devout drew blood, which was sprinkled, together with pulque, on the corn. Other offerings included paper smeared with crude rubber, which was sacrificed to the Tlalocs. If a plant should produce two or three ears, a sorcerer was called in by the owner of the land. After certain ceremonies the twin ears were placed at some point near the village where the trail branched. Only some one in dire need was allowed to take these ears. The fact that a maize plant with two ears was of sufficient rarity to warrant calling in the local sorcerer and the performance of a special ceremony is evidence that

the maize of those days could not have been anywhere near as highly developed as the modern plant.

Maize is believed to have been first cultivated in the Highlands of Mexico, where a possible wild ancestor is to be found in Teocentli, or maize of the gods, as its Aztec name means (*Euchloena mexicana*). This plant bears more resemblance to a grass than modern maize, but it has recently been suggested by a botanist that maize evolved from the accidental crossing of some species resembling sorghum with it. Once, however, it had come under cultivation, its spread was rapid, and at the time of Columbus it was cultivated from southern Canada almost without a break as far south as central Chile. Many varieties of maize were grown by the Mexicans, but in this respect they were outstripped by the ancient Peruvians.

Agriculture may have had an accidental start in the New World. The pre-agricultural peoples undoubtedly made considerable use of nuts, fruit and seeds to round out their menu of meat and fish. These seeds were collected in baskets, and brought back to the settlement for winnowing. Such is still the practice of certain primitive tribes in the United States. Under favorable circumstances seed falling to the ground during winnowing would germinate, and suggest to an observant Luther Burbank of those days the practicability of collecting and sowing the seeds in order to avoid long journeys to collect it and possible conflicts with other groups who claimed the same collecting grounds.

MEXICO BEFORE CORTEZ

A food plant of considerable importance in ancient Mexico was a species of amaranth (*Amaranthus paniculatus*), which remained unidentified until a few years ago although still under cultivation in Mexico. It was known to the Aztecs as Huahutli. The grain is smaller than mustard seed, but each plant yields a prolific crop. The seed, after parching and grinding, was mixed with water to form a variety of pinol drink, but the chief importance of the plant lay in its ripening, for it was harvested at the end of the rainy season. Once the Huahutli crop was gathered the people were insured against serious want should the maize crop prove a partial failure. Its economic importance is seen in the fact that over 150,000 bushels were annually paid to Montezuma as tribute.

As a harvest thanksgiving, idols about nine inches high were made from flour of the first seed harvested kneaded with maguey sap. After baking, the idols were placed on the family altar, where offerings of flowers, candles, copal incense and pulque were made to them. The following day the ideals were ceremonially eaten. At the feast of Huitzilopochtli a large idol of the same type was made of amaranth seed flour and carried in a litter to the god's temple. The eyes were made of inlaid stones and maize grains served as teeth.

Other stable products of the Valley of Mexico included beans, squashes, sweet potatoes, chili peppers and tomatoes. In addition to these, many agricultural products of the lowlands, of which cacao was the most

important, were brought in trade to the plateau country. The cacao tree, which requires a hot, damp climate and plenty of shade, was planted in groves shaded by a taller tree of thick foliage known as the mother of the cacao tree. The kernel was esteemed not only for the chocolate made from it, but also as currency. As such it was used all over Central America. Indeed, one early writer, not a cleric, tells us that in Nicaragua a lady's favors could be had at the price of eight cacao beans. The use of cacao as a currency has survived into the present century in some of the remoter parts of southern Mexico and Guatemala. Peter Martyr has the following apposite comment on this use: "O blessed money, which yeeldeth sweete, and profitable drinke for mankinde, and preserveth the possessors thereof free from the hellish pestilence of avarice, because it cannot be long kept, or hid under ground." A type of counterfeit money existed in ancient Mexico, for we are told that certain dishonest persons used to bore holes in the kernels, through which they extracted the contents, filling the hollowed kernel up once more with earth.

Chocolate, as an imported article, was always a luxury in the plateau country, seldom appearing on the menus of other than rich persons. It was frothed with a swizzle stick, and served with spices and ground maize, chili pepper frequently serving as the spice. Our English words cacao and chocolate are derived through Spanish from the Aztec, as, too, are the names tomato and aguacate.

Maguey was cultivated on a large scale in the plateau country. From the leaves a fibre was derived, and this was used in the manufacture of coarse cloth resembling jute, twine, and carrying bags. The fermented juice supplied pulque, or octli as it was called, the principal intoxicant of the plateau Mexicans. Every action in the cultivation of the maguey, such as the transplanting and drawing of the liquid, was accompanied by its appropriate prayer. On the latter occasion the copper knife employed was urged to cause the plant to weep copiously; in other words yield a bountiful supply of fluid.

Only the old people were allowed to overimbibe, intoxication among the younger people being punishable by death, although this rule did not apparently apply to the ceremonial feasts and drinking bouts, at which the devout, for religious reasons, drank to the point of insensibility. Indeed, at certain religious festivals of this nature in some parts of the country liquor was forced into the intoxicated bodies of devotees in an unnatural and disgusting manner. Generally speaking, liquor was not drunk for social but for religious reasons.

The only domesticated animal known to the Mexican was the dog. Of these large herds were kept, the females for breeding, the males for eating and for sacrificial purposes. There were several breeds, the most interesting of which was a dog with little or no hair, from which the modern Chihuahua breed is probably descended. According to one early authority, all the hairless dogs were not born this way, for some were rubbed

with a certain resin which caused the hair to fall out. At night these dogs were protected from the cold by being wrapped in cotton mantles. The same authority (Sahagun) adds the following description of these dogs with little hair: "They generally have a long muzzle, long and sharp teeth, ears hairy and sharply pointed, and their heads large. They are corpulent; their claws are pointed. They are tame and domesticated, and accompany or follow their masters. Habitually good-tempered, they wag their tails, growl, bark, and let their ears drop on their cheeks as a sign of friendship. They eat bread, green corn, flesh both raw and cooked, dead bodies and food that has turned bad." As explained on page 52, dogs played an important part in mortuary rites. Oviedo, an early Spanish writer, writes that stewed dog was a delicious dish.

Large flocks of turkeys were raised, and in many parts of the country a species of small stingless bee was kept in hives made from tree trunks. Hunting naturally played an important part in the economic life of a people thus handicapped by a lack of domesticated flesh-producing animals. A short description of a communal hunt will be found on page 000.

When hunting alone many ceremonies had to be undergone before setting forth. On departing to hunt deer, for example, it was very necessary that the hunter be calm and even-tempered. On reaching the hunting ground he invoked a number of deities including the earth goddess, the four winds and the Tlalocs to have

pity on him and aid him in his hunt. Later he prayed to the deer to advance tamely and allow themselves to be shot so that he might be able to offer part of their flesh to Mixcoatl, the hunting god, and the goddess Xochiquetzal. The prayers are of a highly ritualistic nature, and contain many recondite allusions, some of which are difficult to understand at the present time. Similar prayers were offered whenever hunting took place. A short address made to the bees when removing the honey well illustrates the general type of these discourses: "I, who come to do this unfriendly act, come compelled by necessity, since I am poor and miserable; thus I come only to seek my maintenance, and so let none of you be afraid nor be frightened of me. I am only going to take you so that you can see my sister, the goddess Xochiquetzal—she who is called 'Precious branch!'" Fish were caught with hooks or various types of traps. Gold hooks were apparently used among the Mayas, but none have so far been definitely reported from Mexico. A kind of fish scoop of cane was much employed. This was wide-mouthed, gradually narrowing towards the point. Bait was placed in this, and it was supported in midstream by means of empty calabashes. More elaborate traps of lines of stakes were also employed as fish weirs.

When starting to fish the fish were flattered by being addressed in this manner: "My uncles, the painted ones, the ones decorated with spots. You who have chins, horns and fins like beautiful featherwork or turquoise,

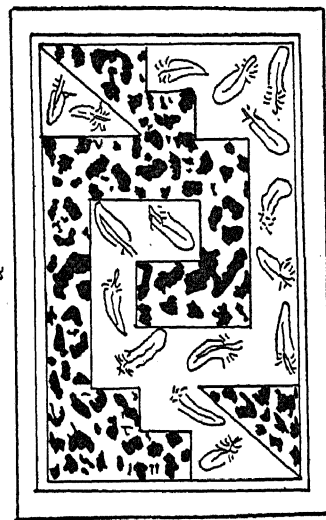
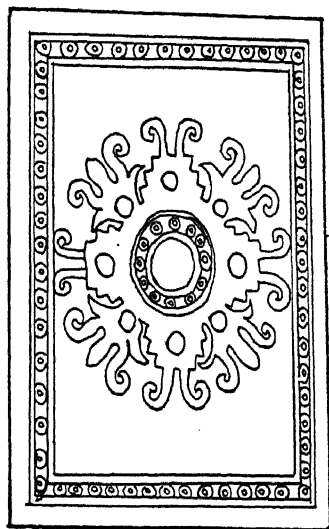
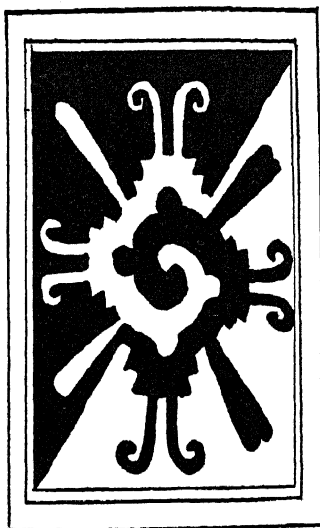
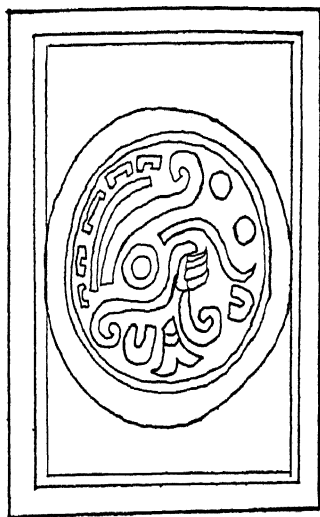


PLATE VIII. DESIGNS ON MANTLES. MAGLIABECCHI CODEX

come here and make haste to come for I seek you." The bait and the traps were also invoked to aid in the work, and flattered with soft words, while alligators were bidden to stay away. One gets the impression that these numerous hunting and fishing prayers, as well as those used in planting and harvesting the crops, are a peculiar blend of command to their hearers to fulfill their function of supporting man directly and the gods indirectly, of apology that man only disturbs them through dire necessity, and of outrageous flattery. It will be noticed that the gods are only indirectly invoked, and the prayers serve to show the strong survivals of a crude animism that underlay Mexican religion. Probably these prayers would not have been countenanced by an orthodox Aztec priest, but they demonstrate clearly the attitude of the Mexican peasant.

Game was always somewhat scarce, and the Mexican peasant was of necessity largely vegetarian. Maize, beans, and chili pepper were the three fundamental elements of his diet. Cooking was woman's task. In preparing tortillas, the form in which the maize was chiefly consumed, the maize grain was first left to soak overnight in water and lime or water and ashes. This loosened the hull of the grain. After washing in water to remove the lime, the grain was ground on a concave stone with a stone roller. The concave stone, known as the metate, a corruption of its Aztec name *Metlatl*, frequently stood on three feet. Next the prepared dough was pressed out with the fingers to very thin disks, and

placed on the griddle, a circular pottery tray, which rested on the three stones of the hearth. In a few minutes with a low fire the tortilla was ready to serve. Beside its use for grinding maize for other dishes and also drinks, the metate was also used for grinding other seeds such as cacao beans. Doctor Redfield, in commenting on the time wasted in this drudgery, estimates that the average Mexican Indian woman of to-day spends six hours a day in preparing tortillas where she alone has to prepare the food for a good-sized family, using the metate.

Maize dough was also mixed with water to form *posol* drink. Rolls of dough mixed with fat and often with vegetable or meat centres were placed in maize leaves, forming the well-known tamal. In ancient times, however, tamales appear to have been eaten only during festivals, public or family. Practically all dishes were highly flavored with chili pepper, and if, as one imagines, the ancient Mexican enjoyed his food as highly spiced as does the modern Indian, he must have had a tongue with the consistency of alligator hide. For sweetening honey was used as well as a syrup obtained from the maguey plant. In addition to the more usual method of boiling, food was also cooked in stone-lined underground pits, which were warmed by lighting a fire inside. The fire was removed, and the food, wrapped in leaves, placed in the hole, which was covered with sticks supporting leaves and turf. The practice of frying appears to have been unknown.

In the houses of the humbler people meals were eaten squatting or sitting on blocks of wood around the hearth. When guests were present, the men ate first, the womenfolk of the household serving them, and eating when the men had concluded. Tables were not used, and a rolled tortilla served as spoon; teeth or fingers as knife. Pottery vessels were used to carry and store water, to boil food, and to a limited extent as dishes. A peculiar food much in demand in the Valley of Mexico was made from a kind of ooze on the surface of Lake Texcoco. This was spread out to dry on the shore, and then cut up into bricks to be sold for eating. It is referred to in the description of the market given below. Gnat-like insects from the lake were also eaten.

Certain plants resembling black mushrooms were eaten with honey before some feasts. They caused hallucinations and an effect of drunkenness. One of the early writers also mentions certain red mushrooms as having the same effect, but the mushrooms were actually dried peyote cactus flowers. Peyote seeds were the centre of a regular cult. Candles were burned in front of the packets of seeds, and offerings made to them. A drink made from these peyote seeds also caused hallucinations, but it was entirely employed in curing sickness, and for divinatory purposes. Were a person to lose any valuable possession, he called in a certain sorcerer, who after enquiring the details, drank peyote. While under its effect he had a vision in which an old man, the spirit of the peyote, appeared to him and solved the problem

as to where the missing article was located, or in the case of sickness, revealed who was the maker of the black magic that had caused the sickness. Tobacco, too, was used to a limited extent in divination, as well as a plant of the same botanical genus (*Datura*) as the well-known Jimson weed.

Surplus products were taken to market where they were sold or exchanged for other products. Bernal Diaz, who took part in Cortez' march on Mexico City, describes (Maudslay translation) the market in the following words: "When we arrived at the great market place, called Tlaltelolco, we were astounded at the number of people and the quantity of merchandise that it contained, and at the good order and control that was maintained, for we had never seen such a thing before. The chieftains, who accompanied us, acted as guides. Each kind of merchandise was kept by itself and had its fixed place marked out. Let us begin with the dealers in gold, silver, and precious stones, feathers, mantles, and embroidered goods. Then there were other wares consisting of Indian slaves both men and women; and I say that they bring as many of them to that great market for sale as the Portuguese bring negroes from Guinea; and they brought them along tied to long poles, with collars around their necks so that they could not escape, and others they left free. Next there were other traders who sold great pieces of cloth and cotton, and articles of twisted thread, and there were *cacahuateros* who sold cacao. In this way one could see every kind of

merchandise that is to be found in the whole of New Spain [Mexico], placed in arrangement in the same manner as they do in my own country, which is Medina del Campo, where they hold the fairs, where each line of booths has its particular kind of merchandise, and so it is in this great market. There were those who sold cloths of henequen and ropes and the sandals with which they are shod, which are made from the same plant, and sweet cooked roots, and other tubers which they get from this plant, all were kept in one part of the market in the place assigned to them. In another part there were skins of tigers and lions, of otters and jackals, deer and other animals and badgers and mountain cats, some tanned and others untanned, and other classes of merchandise.

“Let us go and speak of those who sold beans and sage and other vegetables and herbs in another part, and to those who sold fowls, cocks with wattles (turkeys), rabbits, hares, deer, mallards, young dogs and other things of that sort in their part of the market, and let us also mention the fruiterers, and the women who sold cooked food, dough and tripe in their own part of the market; then every sort of pottery made in a thousand different forms from great water jars to little jugs, and these also had a place to themselves; then those who sold honey and honey paste and other dainties like nut paste, and those who sold lumber, boards, cradles, beams, blocks, and benches, each article by itself, and the vendors of pitch-pine firewood (for

torches), and other things of a similar nature. I must furthermore mention, asking your pardon, that they also sold many canoes full of human excrement, and these were kept in the creeks near the market, and this they use for making salt or tanning skins, for without it they say that they cannot be well prepared. . . .

"Paper, which in this country is called *Amal*, and reeds scented with *liquidambar*, and full of tobacco, and yellow ointments and things of that sort are sold by themselves, and much cochineal is sold under the arcades which are in that great market place, and there are many vendors of herbs and other sorts of trades. There are also buildings where three magistrates sit in judgment, and there are executive officers like *Alguacils* who inspect the merchandise. I am forgetting those who sell salt, and those who make the stone knives, and how they split them off the stone itself; and the fisherwomen and others who sell some small cakes made from a sort of ooze which they get out of the great lake, which curdles, and from this they make a bread having a flavor something like cheese. There are for sale axes of brass [bronze] and copper and tin, and gourds and gaily painted jars made of wood. I could wish that I had finished telling of all the things which are sold there, but they are so numerous and of such different quality and the great market place with its surrounding arcades was so crowded with people, that one would not have been able to see and enquire about it all in two days."

Every town possessed its local market, which the people attended every fifth day. Scenes such as Bernal Diaz describes can still be seen in many towns of south Mexico, although, naturally, not on so vast a scale, and the merchandise is still largely transported on the back of its owner as in Bernal Diaz' time.

In addition to their work in preparing and cooking food, women were also occupied in spinning and weaving. Persons of the better class wore cotton garments, but cotton was scarce in the plateau country, since much of it was imported. Some of the finest decorated cotton mantles were imported into Mexico from Yucatan, where the Mayas had earned a high reputation for their skill in this work. Cotton did not grow in Tlaxcalan territory, hence when the inhabitants were at war with the Aztecs, which was most of the time, they were deprived of cotton goods by blockade. The Aztecs and their allies similarly cut off the Tlaxcalan imports of salt.

Cotton was spun on spindles passed through pottery whorls to give added momentum. The raw cotton was hung over the right shoulder, whence it was fed with one hand, while the other was used to twirl the spindle. Sometimes the spindle was rested on the base of a small pottery bowl. For weaving primitive hand-loom of the rod-head type, still to be seen in the remoter villages of Mexico, were employed. The rod at the top of the warp was attached to a post, while the whole was held taut by being attached to a band which passed round

the weaver's waist. (Plate V.) These looms appear to have seldom or never exceeded a breadth of about eighteen inches, and for wide cloths it was necessary to sew together two or more strips. Designs were made by using different colored threads in both the warp and woof, and probably by the use of tie-dyeing in which sections of the cloth to be dyed are tied so tightly that the dye cannot penetrate, and the cloth has a mottled appearance. By extension several colors can be applied to every thread. It is also possible that the batik technique was also used, since a similar method was used in decorating pottery.

Designs were also embroidered on cloth either with colored cotton, or by sewing on feathers arranged in patterns. It is doubtful, however, if the Mexican weavers attained such high levels as were reached in ancient Peru. Dyes were obtained chiefly from the vegetable kingdom, but others derived from the soil were also employed. The most interesting dye contributed by the animal kingdom, in addition to cochineal, was a purple obtained from a sea clam (*Purpura patula*) found off the southwest coast of Mexico. The process is very similar to that used in obtaining the imperial purple of ancient Rome. This purple cloth was very highly valued both for its rarity and for the distance it had to be transported. The industry continued to flourish until the present century, when a rapid decline set in due to the cheapness of aniline dyes. Many elaborate patterns on cotton mantles are reproduced in the codices. (Plate VIII.)

Maguey fibre was also woven for coarse clothing and carrying bags, particularly among the poorer people. This fibre was also dyed, and simple patterns introduced. The Tlaxcalans largely wore garments of maguey fibre for the reason already given. Clothing among the Otomies also was largely of this material due to the general poverty and primitiveness of this people. Skins were also worn among the Otomies, but cloaks of rabbit skins were highly valued in most of the plateau country, and rabbit hair was woven as borders for cotton mantles.

The general costume worn by men was made up of two garments. The most important of these was a loin cloth called *maxtli*. This was wound round the waist and between the legs, the ends hanging down in front and behind. Among the poorer people this was made of a simple strip of undecorated cloth, but among the nobility the *maxtli* was decorated with embroidered patterns and feather fringes. The second garment, which was worn only in cold weather or during festivals, was a cloak or mantle worn round the shoulders and tied by knotting together two of the corners on the chest or under one arm. This again varied according to the wealth of the owner from rough maguey fibre to embroidered cotton or rabbit skin. Young men in the military school wore mantles of maguey fibre to which were attached small sea shells. Members of the nobility wore a similar decoration, but the shells were made of gold. Feather cloaks were also worn by the wealthy.

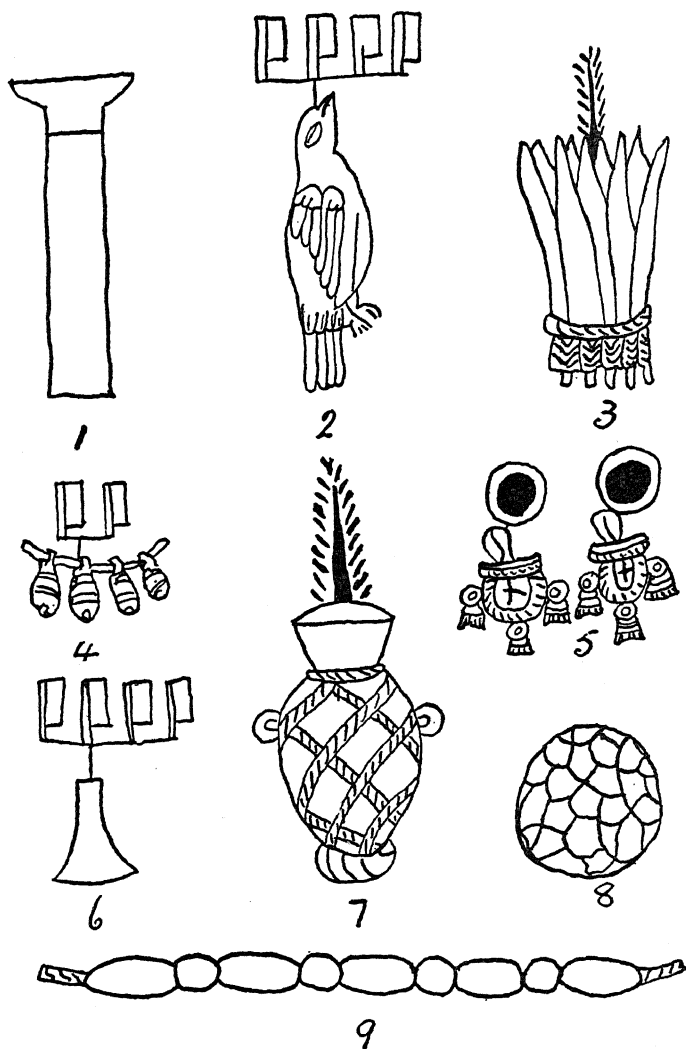


PLATE IX. ARTICLES OF TRIBUTE

1, Amber tubes; 2, Eighty plumage birds; 3, Four hundred bunches of feathers; 4, Forty strings of copper bells; 5, Sixteen thousand balls of copal incense; 6, Eighty copper axes; 7, Four hundred jars of honey; 8, Mosaic mirror; 9, Jade necklace. Mendoza Codex.

Sandals were made of coarse maguey fibre, the leaves of a tree called *Yecotl*, or of hide. A large number of pottery stamps are found throughout Mexico, and these, apparently, were used for stamping designs on cotton clothing as well as on the body. Many of the designs are intricately carved; one of the favorites represents a spider monkey. Body painting was a common practice particularly among the Totonacs and Huastecs, for very many of the figurines from this area show large areas covered with black paint. Direct evidence for tattooing does not exist among the Aztecs, although there are vague references to the custom, but since it occurred among the Mayas, it was in all probability also a Maya custom. Prostitutes stained their teeth red with cochineal, and in other parts of Mexico it was the custom to stain the teeth black. Incisor and canine teeth of the upper jaw were also occasionally inlaid with small disks of jade, examples having been reported from Oaxaca and Puebla. The drilling of the holes, which was probably done with a hollow bone or bamboo drill and sand, must have been extremely painful. Teeth were also occasionally filed, but neither of these customs was as common as among the Mayas.

Nose, lower lip and ear-plugs were worn by persons of rank. These were of jade, crystal, obsidian, or other precious stones or of metal. Persons of less rank wore plugs of pottery. Some of the jade ear-plugs, which were worn in the lobe of the ear, are of considerable size, reaching a diameter of more than two inches. One

of a similar type found by the writer in a Maya ruin had a width of little short of five inches. Skillfully decorated gold and copper rings were worn, but they are comparatively scarce in archæological collections. The outer half of the circumference was frequently twice as wide as the hidden half, and carried designs often of birds' or animals' heads.

Necklaces of all descriptions were worn by the nobility. Those of jade were considered most valuable, being more prized than gold. The former consisted of globular or tubular beads with little or no decoration; the latter were made of beads of all shapes. Sometimes gold was combined with semi-precious stones. Among the treasures of Mexico sent by Cortez to the Emperor Charles V was a large collar of gold and mosaic stonework of eight strings made up of 132 red stones and 163 jade beads with twenty-seven gold beads attached, with four stone amulets in the centre inlaid or with settings of gold. From these amulets, which probably represented gods, hung pendants. Such a necklace with such a large quantity of jade beads must have been of very great value.

Aztec gold was principally obtained from what to-day forms the State of Guerrero, although Oaxaca seems to have been the area of greatest output, but most of it was retained and worked by the Zapotecs. A third important centre was on the east coast of Mexico in the vicinity of the State of Vera Cruz. The metal was not mined but washed from river sand by the use of gourds.

The gold was usually transported as dust placed in transparent quills. Bernal Diaz in a continuation of his description of the market writes: "There were many more merchants, who, as I was told, brought gold for sale in grains, just as it is taken from the mines. The gold is placed in thin quills of the geese of the country, white quills, so that the gold can be seen through, and according to the length and thickness of the quills they arrange their accounts with one another." He uses the term mine to mean placer mining, as can be shown by extracts from other parts of his history. Gold was also occasionally transported in the form of bars. The greater part of the metal reaching Mexico was paid as tribute, codices giving lists of towns of southwest Mexico, and the quantity of gold to be paid by them.

The working of gold, like most crafts, was attributed to the Toltecs. At the close of the Aztec empire the craft was particularly developed at Azcapotzalco, once the capital of the Tepanecs, but now a suburb of Mexico City. As explained on page 180, Xipe was the patron god of the goldsmiths, who sacrificed victims in his honor. Gold was smelted in charcoal-heated crucibles. In place of bellows the smith blew down a tube. The most usual method of fashioning gold ornaments was as follows: The artificer mixed very finely ground charcoal with the clay used in pottery-making. The well-kneaded lump was cut into disks and left to dry for two days. Then being thoroughly hard it was carved into a negative of the requisite shape with a copper imple-

ment. The charcoal cast was next covered with a mixture of clarified wax and charcoal, and over the surface of the wax was sprinkled a thin coating of charcoal powder. Finally the whole was enclosed in a tight-fitting mold of coarse charcoal and clay, leaving only a narrow spout leading from the outside to the wax. The whole was then heated so that the wax melted and was poured out through the spout, and replaced by molten gold or an alloy. As soon as this was cool, the mold was broken, and the gold, having occupied the place of the wax next to the negative, or mold, was of the required shape.

In addition to this method, gold was hammered out into the required shapes. Thin gold-leaf was also manufactured, and applied as a covering to wooden-carved objects, such as spear-throwers, two beautiful examples of which are to be seen in the Florence Anthropological Museum. As illustrative of the craftsmanship of the Mexican goldsmiths might be mentioned three or four of the articles sent to Spain in 1525 as the king's share: "A flower of stone set in gold like a small bell weighing twenty-four pesos," "A collar of small melons consisting of thirty-two pieces of greenstones, made so that they seem to issue from the flower, the flowers and stalks being of gold," "A small scallop-shell set in gold with a greenstone in the centre," "A butterfly of gold with the wings of shell, and the body and head of greenstone." It must be remembered that all objects of pure gold, with very few exceptions, were melted down, so

that we have descriptions of the objects only partially of gold that could not be melted down. Doctor Saville in his *Goldsmith's Art in Ancient Mexico* gives full lists of the shipments, and to him we are indebted for the list of objects just given.

Owing to the melting down of the gold, not a single example of this original loot has survived, and we are dependent for visual knowledge of Mexican gold work on occasional archæological finds. These are scarce, and frequently the objects even to-day find their way into the melting pot, the finders not realizing that their archæological merit is greater than their bullion value. Most modern finds of gold have been found in the state of Oaxaca, and as this chapter was being written news arrived of the finding of what will surely prove to be the greatest haul of gold objects made in Mexico in the last two hundred years. Luckily the finds were made under the supervision of Licenciado Alfonso Caso, one of Mexico's leading archæologists, consequently the specimens will enrich the national collections and not find their way to the melting pot. This gold was found in a burial chamber close to the famous ruins of Monte Alban in Oaxaca.

Gold was very frequently alloyed with copper, and sometimes with silver. The art of metal working seems to have had its New World origin in Peru or the contiguous regions, and thence spread to Colombia and the Panama-Costa Rica area. It does not appear to have been introduced into Mexico and the Maya area until

some time between the eleventh and thirteenth centuries. No authenticated example of metal has ever been found in the Maya Old Empire period. Some of the Mexican gold pieces resemble those of the Panama-Costa Rica region, and doubtlessly the first gold objects known in Mexico were trade pieces from that area. Gold or copper bells of Mexican workmanship were traded far and wide, having turned up in archæological excavations in areas as distant as Honduras, Yucatan, and New Mexico. One of the strangest examples of gold work was reported from Tepic in northwest Mexico, where a pottery vessel of the plumbate glaze ware was found. This vessel, which from the nature of the clay (p. 000) was almost surely imported from far-away El Salvador, was made in the shape of a turkey with the head and neck painted bright red. The wattles are ornamented with thin leaf gold, the whole effect being extremely naturalistic.

The highly prized jade largely reached Mexico City as tribute from the conquered provinces of southwest Mexico, particularly Guerrero and northern Oaxaca. Jade is really a misnomer, as the stone is actually jadeite. For many years it was believed that this had been imported into Mexico from Asia, but chemical analysis shows the percentages of the components of Mexican jade vary slightly from those of Asiatic jade; consequently Mexican jades could not have been transported across the Pacific. No authenticated deposits of jade have been found in modern Mexico, but there are two

explanations for this. Firstly, large districts of south-west Mexico have never been thoroughly examined by geologists, and secondly, ancient Mexican jade was largely obtained from water-carried boulders, as the specimens themselves frequently show. In the course of centuries this supply was practically exhausted, and hence the rarity of jade in ancient times and the failure to find it in modern times.

Jade was worked with the aid of sand. Apparently, for cutting string was rubbed up and down a groove liberally strewn with sand, but the more usual method of working was with the aid of a hollow drill of bamboo or bone, possibly operated with a bow drill, similar to that used by the Eskimo, and sand. Some thirty years ago a very beautiful onyx tablet in Field Museum was accidentally broken. The break revealed a bone drill still in position in the middle of the hole bored through the centre from top to bottom. Holes of this nature were invariably bored from both ends, and serve as a first ready test as to the authenticity of a doubtful piece, since the bore is always widest at the two mouths, gradually narrowing towards the centre and frequently the two bores do not exactly meet. Faked pieces often show that the hole, made with a modern drill, passes through from one side to another without narrowing. If only the fakers would take archæologists into partnership, it might prove profitable for them, and give some of us more lucrative appointments!

Most jade pieces show clear examples of shallow drill



Courtesy of the Trustees, British Museum

PLATE X. TURQUOISE MOSAIC MASK WITH SHELL TEETH
AND SHELL EYES

bores used to indicate the eyes and ear-plugs. Particularly is this true of the innumerable figurines from the Mixtec country of Oaxaca, where the technique is combined with the cord cutter. Mexican jades vary from apple-green to a marked gray-green. Field Museum possesses a large mask of black jade, but this is rare, and it is doubtful if the Mexicans realized that it was of the same stone. On the other hand, many other green stones were confounded with jade by the Aztecs, and even copper-stained rock crystal comes into this category, although the craftsmen must have realized the difference owing to the variable facility with which the substitutes were worked.

Turquoise was also highly valued, particularly for mosaic work. This was mined, in all probability, in the southern Vera Cruz region, although it has been claimed that it was fetched from the mines of New Mexico. Owing to its rarity it was reserved for divine use. A few beautiful examples of turquoise mosaic work are extant, particularly in the British Museum, where are preserved a number of the presents sent by Cortez to the Emperor Charles V. (Plate X.) Patterns were picked out by using different colored stones, or making the figures in low relief. Some of the best examples in the New World were found a few years ago in a cave in Mexico, and are now on exhibit in the Museum of the American Indian, Heye Foundation in New York. According to one early authority turquoise was reserved entirely for religious purposes, but we know that the Mexican rulers used a

head-dress with turquoise decoration, possibly because they were considered more than semi-divine.

Most cutting implements were made of obsidian or flint, particularly the former, of which there was a plentiful supply owing to the volcanic nature of the country. From oblong hunks of this material, called cores, thin slivers were removed all round the circumference by pressure flaking. Subsequently pressure behind the angle formed by the removal of previous slivers caused the loosening of other three-faced thin slivers, which served as knife blades. (Plate XI.) The pressure was exerted by pushing with the chest on a T-shaped wooden implement, the point of which rested against the required point, the core being held between the worker's feet. A small percussion bulb marks the point of pressure. Flakes could be removed from the core until it was reduced to very small dimensions. Cores of this description may be found in large numbers in the Valley of Mexico. Ordinary thin flakes were used without retouching as knife blades, since they have an extremely sharp edge. Spear-heads of obsidian were made by retouching the larger blades with secondary pressure flaking. Flint spear-heads with secondary pressure flaking were also used, and the best rival the finest stone work of the Old World. (Plate XI.)

Implements of similar type were set in elaborate mosaic-covered wooden handles and employed as sacrificial knives. Frequently the handles appear to have been made in the shape of crouching men. Beautiful

examples of such sacrificial knives are to be seen in the British Museum and the Anthropological Museum in Florence.

Obsidian was also polished to serve as mirrors and was carved into masks, long tubular beads and labrets. Rock crystal appears to have been highly prized. One of the finest examples of rock crystal carving is in the form of a very realistic human skull that formed part of the early loot sent from Mexico to Spain, and is now in the British Museum. Labrets and beads of rock crystal are also to be seen in a number of museums. Graceful vases of calcite were made in the southern part of the Vera Cruz area, and apparently were also highly prized. Small amulets and beads were made from a wide range of stones, both semi-precious and common.

Feather working was an important industry in ancient Mexico, but very few examples of this craft have come down to us. The feather workers formed a wealthy and honored guild closely united to the merchants, who brought them their finest feathers from the southern lowlands. They had seven patron gods, of whom the most important was Coyotlinauatl, a deity with the face of a coyote and long gold teeth. The feather workers lived in a certain district of Mexico City, honoring their deities with the usual sacrifices of slaves. In the simpler work feathers were merely sewn on cloth, but in the more elaborate work the feathers were arranged in mosaic fashion to form delicate patterns. In the finer work only the small delicate feathers were used, and they

were arranged to overlap so that no part of the quill was visible. The most valued feathers were the long tail feathers of the quetzal and other trogons. These were sewn on head-dresses and banners. Most of the finer feathers were imported from the southern lowlands. In parts of Central America macaws were kept in captivity to supply the feather demand, and descriptions of Montezuma's aviary speak of ducks, flamingoes, macaws, parrots, and quetzals being kept there for their plumage. If quetzals were indeed kept in captivity the Aztecs had greater ornithological knowledge than modern man on this subject, for it has been found impossible to keep this bird in captivity, since it feeds off insects on the wing, hence its adoption as the national symbol of Guatemala.

Feather mosaic work was frequently combined with gold to produce the most intricate designs. Among the objects sent to the Emperor Charles V were a feather pattern with turquoise mosaic and a centre of gold, the whole with a leather backing, and a feather head-dress surrounded by sixty-eight pieces of gold and twenty turret-shaped objects of the same metal. Unfortunately the whole industry collapsed soon after the Spanish conquest, living only in the descriptions of the Spanish chroniclers and half a dozen museum pieces the worse for three centuries of neglect.

The trade of carpentry was passed on from father to son, the finest work requiring not only skill but also a high artistic ability. Copper and stone adzes were used,

but for the more delicate work sharp stone implements were probably favored, together with drills for circular work and cords employed with sand for cutting straight lines.

Few examples of carved wood have survived to the present time, but of this small number the majority, comprising drums and spear-throwers, are of outstanding merit. Nearly all these fine pieces, which carry carved designs depicting deities and religious scenes, are to be seen in the European museums, although there are a few examples in the Heye Foundation in New York and one or two in Mexico.

Carved wooden stools, either with or without a back support, are depicted in the codices, but none of these have survived to the present time. The supports are usually shown as carved with the step pattern so frequently used at Mitla (p. 264). Bernal Diaz, in his description of the great market place in Tenochtitlan (p. 77), speaks of gaily painted wooden vessels. These apparently were lacquered. At the present time delicate lacquer work is done in western Mexico, and in some cases the designs are definitely native. This, together with the fact that lacquered wooden vessels were made in Peru prior to the discovery of America, suggests that the craft was not introduced by the Spaniards, but is of native origin.

From early accounts it is also known that wooden chests and boxes were manufactured, but again not a single example has survived. Of the tens of thousands

of wooden idols that must have existed in Mexico five hundred years ago, practically none survive, and those very few that have come down to us, escaping the bonfires of the missionaries, are of little merit.

Every day objects of wood, such as bows, canoes, paddles, household utensils, were presumably not made by professional carpenters, but by the man who needed them for his own use. The same, of course, applies to a number of the objects, on which we have already touched, except when they were needed for ceremonial purposes or for persons of high rank. The average man would manufacture his own spearthrower, but a skilled carpenter would be employed to carve and adorn the spearthrower carried by Montezuma or placed in the hands of some idol.

Factories were non-existent, for crafts were carried on at home. Most craftsmen carried on their trades as a side line, living in their native villages, and never neglecting to plant their crops. The goldsmiths, and possibly other metal workers, appear to have been the only craftsmen who did not conform to this practice.

Copper working was little developed in Mexico at the time of the conquest, since copper tools were frequently not superior to those of obsidian or stone. Copper axes were used to a limited extent, but the metal was mainly employed for ornaments or to be alloyed with gold. The chief purpose to which copper was put was the manufacture of the clapperless copper bells described on page 133. A few copper rings have been

found in the course of excavations as well as other simple copper ornaments, but the chief use, apart from the manufacture of bells, to which copper was put, was the making of thin ax-shaped blades. These have a crescentric blade on the end of a thin haft of copper set at right angles. They are found principally in Oaxaca, and are reported to have served as currency. (Plate XI.)

Early Spanish reports speak of the natives mining tin. This, together with the results of analyses, shows that, like the Peruvians, they knew how to make bronze, but the invention must have been made very shortly before the conquest, since few of the objects so far analyzed show evidence of a deliberate intention to produce bronze.

House building was not a trade, but a task in which every one took a hand, the members of a community assisting any one who needed a new home without reward save their food during the work and a feast when the task was completed.

The average house of the poorer class Aztec was a square structure with walls of adobe, rough stones set in mud, or mud-covered wattle and cornstalks, with the outsides frequently covered with plaster. Pent-shaped roofs of thatch were most common, but flat roofs were used in the more pretentious structures. In some parts of southern Mexico and among the Huastec round houses were built. Houses of the poorer people usually consisted of a single windowless room, light entering through the doorways. Furniture was scarce, straw mats

for beds and low wooden stools being the principal fixtures. Sometimes the kitchen was situated in one corner of the room, but more usually was located in a minor structure behind the house. In addition, a round tower-like structure with walls of maize stalks was placed in front of the house to hold maize on the cob. Often another construction, shaped like a huge vase with swelling sides, served as a second granary, being employed to hold shelled maize. This was mud-plastered.

Many families possessed sweat houses. These probably did not vary to any marked degree from those still in use to-day in many parts of central and southern Mexico. "This," to quote Redfield's description of a modern sweat house in Tepoztlan, "is made of stone set in mortar. It is rectangular, approximately square, and about five feet high at the centre. The roof is low-peaked. The one entrance is barely large enough to permit entrance of a man on hands and knees." These sweat houses were principally used for therapeutic purposes, although there appears to have been an idea of purification too in their probable use before religious ceremonies. Steam was generated by pouring hot water on heated stones. The sweat house is a very widely distributed trait of ancient American civilization both in North and Central America. Such in brief are the structures that housed the peasant household of the Aztecs and its possessions. Many families in addition owned turkeys that necessitated small fowl houses, and bees,

whose hives were formed from hollowed-out sections of tree trunks stopped up at the ends, except for exits, with mud.

The houses of the wealthier members of the community ranged from the simplicity of the homes of the peasants up to the luxury of Montezuma's palatial residence described in Chapter IV.

Many of the villages and towns situated on the shores of Lake Texcoco were composed of houses set on piles. For locomotion, fishing and duck hunting these lake dwellers made use of simple dugout canoes, sometimes decorated with carved projections fore and aft, presumably made by adding a gunwale with projections at these points. (Plate XXXI.) Tenochtitlan (Mexico City) itself was situated in the middle of Lake Texcoco prior to the conquest, and the streets in many parts were canals and the outlying houses stood on piles.

The location of the Aztec capital in the middle of a lake made it an ideal defensive position. Except in canoes, it could only be approached by one of the four causeways that united the city to the mainland. These were raised above the lake level, the foundation consisting of rubble and rocks. Their defence was made easier by a number of bridges consisting of planks of wood spanning gaps in each causeway. Cortez, in one of his letters to the Emperor, writes that the bridges were so wide that ten horsemen could ride abreast. This implies that the causeways were largely used for religious and civic processions, since a people like the Aztecs,

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possessing no beast of burden or wheeled traffic, could have had no need for such wide roads and bridges. Raised roads of a breadth of thirty feet or more are also reported from eastern Yucatan in the Maya area. They, too, cross shallow lakes, as in the case of the causeways under discussion. Naturally, the bridges also were built to allow the water of the lake to find its own level, and to allow the passage of canoes carrying produce to different parts of the city.

The centre of the city was built on dry land laboriously built up during the early occupation of the city, but in many respects the city as first viewed by the Spaniards must have appeared as a fantastic Venice transported to the New World, with its domed churches converted into the pyramidal homes of Beelzebub.

CHAPTER IV

SOCIAL ORGANIZATION, WAR, AND TRADE

Status of Rulers. Their Election. Tribal Council. Montezuma's Palace and Gardens. Initiation of Ruler. The Geographical Clans. Their Organization. The Basis of Mexican Society. The Four Divisions of Tenochtitlan. Dual Executive. Justice. Judicial System. Slavery. Warrior Classes. Initiation Ceremonies. Warfare. Weapons. Triumphs. Trophies. Causes of War. Merchant Guild. Trade. Markets. Trade Pieces.

THE status of Montezuma and the other Aztec rulers has been hotly debated. The early Spanish writers speak of him as though he were an Emperor of unlimited power, and Prescott, the most popular writer on Mexico in English, paints Montezuma as the head of an absolute monarchy. Bandelier, who might be described as a pioneer debunker, advanced the thesis that Montezuma was little more than an elected executive with limited personal authority. Modern opinion, following the tendency of our age, favors compromise over these fundamentally different viewpoints. The Aztec ruler, the term I use in this book to describe Montezuma and his predecessors, might be compared to the chairman of a financial or industrial corporation. His authority varied according to his personality, and that of the ex-

ecutive council. A strong ruler with a weak council might be something very close to an absolute monarch, just as a strong chairman with a spineless board of directors concentrates power in his own hands. On the other hand a weak ruler with a strong council might find himself with little authority.

The Aztec and other Mexican rulers did not succeed their fathers, but were elected by an assembly of clan chiefs, old leaders and leading priests, whose vote had to be unanimous. The choice was limited to a single lineage (p. 28). In actual practice a younger brother of the deceased usually was elected, or failing that a son, but if the logical successor was unsuitable he was passed over. This council appears also to have had the power of deposing the ruler under exceptional circumstances. Montezuma, while a prisoner in the hands of Cortez, was deprived of his position partly on account of his pusillanimous attitude and partly because of his inability to assume the leadership while in Spanish hands.

The executive council, whose authority was in many ways supreme, apparently consisted of one representative from each of the twenty geographical clans (*calpulli*) which formed the Aztec nation. The council seems to have met once every Mexican month—that is every twenty days—but could be summoned at other times in the event of an emergency. We should probably not be far in error in comparing the relations between this council and the ruler to that of the British

cabinet to the king of England, the council like the cabinet reflecting popular opinion, and the Mexican ruler acting as a constitutional monarch with somewhat more latitude than is allowed the king of England, but like him of considerable importance in state religion. As the nominal head of the Aztec nation, Montezuma was accorded very high honor.

It is related that any chief who wished to speak to the Aztec ruler, approached him with downcast eyes, barefoot, and dressed in the clothing of a person of no importance. Montezuma was usually carried in a litter, the supports of which were borne on the shoulders of four chieftains. Under no circumstances were his feet allowed to touch the soil, and to avoid this mantles were strewn in his path. This is an ancient custom of world-wide practice having its origins in magico-religious concepts. Four other chiefs held over the litter a canopy of green feathers with a fringe decorated with gold, silver, pearls and jade. No one was allowed to lift his head at the ruler's approach. We are told that even the soles of Montezuma's sandals were of gold, while the upper part was adorned with precious stones. Bernal Diaz has left us an interesting description of his habits, from which the following account of palace life is quoted:

"If it was cold they made up a large fire of live coals of a firewood made from the bark of trees which did not give off any smoke, and the scent of the bark from which the fire was made was very fragrant, and so that

it should not give off more heat than he required, they placed in front of it a sort of screen adorned with idols worked in gold. He was seated on a low stool, soft and richly worked, and the table, which was also low, was made in the same style as the seats, and on it they placed the table cloths of white cloth and some rather long napkins of the same material. Four very beautiful, cleanly women brought water for his hands in a sort of deep basin which they call *Xicales* [jicara gourd], and they held others like plates below to catch the water, and they brought him towels. And two other women brought him tortilla bread, and as soon as he began to eat they placed before him a sort of wooden screen painted over with gold, so that no one should watch him eating. Then the four women stood aside, and four great chieftains who were old men came and stood beside them, and with these Montezuma now and then conversed, and asked them questions, and as a great favor he would give to each of these elders a dish of what to him tasted best. They say that these elders were his near relations, and were his counsellors and judges of law suits, and the dishes and food which Montezuma gave them they ate standing up with much reverence and without looking at his face. He was served on Cholula earthenware either red or black. . . .

“From time to time they brought him, in cup-shaped vessels of pure gold, a certain drink made from cacao. . . . Sometimes at meal-times there were present some very ugly humpbacks, very small of stature and their

bodies almost broken in half, who are their jesters, and other Indians, who must have been buffoons, who told him witty sayings, and others who sang and danced, for Montezuma was fond of pleasure and song."

These dwarfs wore rubber footgear to make them bounce better—surely the first recorded case of rubber shoes. Torquemada states that children were purposely deformed to qualify as entertainers, and that albinos were also kept for entertainment, although another early chronicler (Gomara) says that the albinos were kept in the zoological gardens as though to suggest that they were not looked on as human. Albinos were also reserved for sacrifice during eclipses of the sun.

Montezuma's palace is reported to have been built around three patios in the centre of one of which there was a fountain of water brought by conduit from Chapultepec. There were one hundred bedrooms and one hundred baths, so it is clear that the Aztecs reached the American ideal of a bath for every bedroom several centuries ahead of their conquerors. The walls were made of stone and mortar bedecked on the inside with valuable stone, while the woodwork was of carved pine, cedar and palm. Montezuma had a private oratory in the building. This room was 150 feet long and 50 feet wide. The walls were covered with thick slabs of gold and silver and adorned with precious stones. An idea of the great extent of the palace buildings can be gathered from a contemporary statement that in attached buildings the soldiers of Cortez and more than 2000 Tlax-

calan allies were sheltered during the first occupation of the city. The early accounts appear somewhat exaggerated, and it is unfortunate that they cannot be checked archæologically. The roofs presumably were flat like those of the houses of the nobility.

Nearby were Montezuma's zoological gardens, where every kind of wild animal, rare bird and strange reptile was kept. The reptiles included alligators and every conceivable species of snake. Some of the zoo's inmates were kept for eating, or, in the case of many of the birds, for their feathers, but the majority were maintained solely as a curiosity. There were also numerous gardens and woods attached to the palace.

Like most semi-civilized potentates, Montezuma had a large number of concubines, although monogamy was the usual Mexican practice.

On being chosen to succeed to the rulership, a candidate was forced to undergo a rigid period of initiation. At the start of the investiture the ruler clad only in a loincloth marched in silence to the temple of Huitzilopochtli accompanied by the nobility and the allied rulers of Texcoco and Tlacopan. On his arrival the high priest painted him from head to foot with a deep black paint, and then on his kneeling, sprinkled him four times with water. Next the priest decked him in a cloak decorated with a design of bones and skulls, and placed on his head two cloths, one black, the other blue, decorated with similar designs. Magical powders to ward off disease and an incense brazier were also pre-

sented to him. On the conclusion of this ceremony the high priest discoursed at length on his executive duties, to which the future ruler replied with an equally long speech, probably not differing greatly from the platitudinous discourse a modern Chief Elk or Rotarian would make under similar circumstances. Finally the future ruler retired to a small chamber.

Here he remained without stirring from the vicinity for four days, during which he fasted, eating only once a day, and spending the time in prayer and the sacrifice of blood and incense. The former was drawn from his ears and other parts of his body. At the conclusion of the four days all the chiefs, high priests and noblemen conducted him to his palace. Rulers of nations allied to or under the subjection of the Aztecs were confirmed in their office by the Aztec ruler after their election. At a later ceremony of confirmation of the investiture, many prisoners, procured in a special campaign led by the candidate, were offered in sacrifice.

The twenty calpullis that formed the Aztec nation at the time of the Spanish conquest were probably derived from original exogamous clans in which descent was through the mother, but by the time of the Aztec collapse the calpulli functioned more as a geographical organization than one based on kinship, and the descent had reverted from matrilineal back to its first probable form of patrilineal. Apparently there were no prohibitions at this last stage against marrying a fellow member of the calpulli. The calpulli, as we have seen (p.

60) held title to land, which was assigned to the different families that composed it, but apart from this important difference, and the common descent claimed by its members, the calpulli appears to have resembled in most respects the boroughs that made up a mediæval European city. While under the supreme rule of the state, the calpulli functioned in many respects as an independent entity. It had its own elected officials, of whom there appear to have been two of outstanding importance.

One was the military leader of the group, for each calpulli seems to have fought in war as a kind of local regiment; the other a civil official, whose duties appear to have included the disposal of the produce of those sections of the group's land worked in common for religious and other needs. There was also a group council, to which position all the elders of the calpulli appear to have been eligible, corresponding to the borough or parish council of the European city. Meetings were held in a large building or communal house, which served as a men's club for all adult members of the calpulli. Women were probably not admitted to this communal house. Each calpulli also possessed its own temple, and in addition its own patron god, corresponding to the patron saint of the European parish. The upkeep of this temple and its attendant priest or priests was forthcoming from the communal lands, and in all probability each calpulli got a share of the tribute paid by the subjected peoples to the Aztec city-state. Almost

certainly disputes between two members of the same calpulli must have been settled by calpulli judges.

Mexican society can truthfully be described as having been founded on the calpulli. In early times probably independent units, they never lost their independence entirely, but were loosely federated into the Aztec city-state. There was however an intermediate superior union, consisting of four divisions of the tribe, each possibly composed of five calpullis. This larger organization presumably had a religious basis in connection with the ritualistic division into the four world directions. Each quarter had its own deity and temple, and the members of the different calpullis composing a quarter considered themselves to be loosely related by common descent. At the head of each quarter was a war chief of very high rank, second only to the Aztec ruler and the chief civil ruler discussed below. Apparently these war chiefs were of the "royal" lineage, since the Aztec ruler was chosen from their number, and we have already noted that he was always one of a certain lineage. The four war chiefs of the quarters shared the privilege with the Aztec ruler and the chief civil ruler of wearing their hair bound with red leather. Each quarter also possessed an armory and a boys' college. The organization of each quarter probably did not differ essentially from its components—the calpullec (plural of calpulli).

We have spoken of Montezuma and his predecessors as the Aztec rulers. This is in some respects a misnomer,

for the chief executive office was dual. Montezuma was the military and religious leader, and for that reason was of greater importance, but there was also a mysterious official of apparently similar rank rejoicing in the equally mysterious title of Snake Woman. The snake woman, who was male, appears to have been the civil Aztec leader, possibly in charge of the war commissariat and the gathering and division of tribute. Like the military and religious leader he wore the *copilli*, the mosaic-studded crown which rose to a peak in front, and faintly resembled the crown of Lower Egypt. These two leaders with the tribal council, of which little is known but which appears to have consisted of one representative from each of the twenty calpullec, were the executives of the Aztec tribe.

Despite this picture of the fundamental calpullec forming four quarters and federated under the chief Aztec ruler and Aztec civil ruler to form the Aztec city-state organization, there are many gaps in our knowledge of the social organization of the Aztecs. For instance we have no information as to the relationship of members of the nobility to their calpulli. We have also hints that certain trades may have been confined to special calpullec.

Justice was meted out with considerable severity, judging by our modern coddling of prisoners. Prisons were unknown; the only thing approaching these were the wooden cages in which prisoners were usually kept pending sacrifice. These cages, however, had as their

function not the punishment of the prisoner, but the prevention of his escape. A man convicted of robbery was sold into slavery and the stolen goods restored to their owner, but if the stolen goods could not be found the thief paid with his life. Robbery was so rare and contrary to Mexican conventions that the houses had no doors. When the owner was away two sticks were placed in the doorway, and these appear to have acted as a taboo somewhat on the same lines as the taboo signs, such as *crotulus* leaves, left on property in many Pacific Islands to guard it.

Any one caught robbing in the market was beaten to death, while those caught stealing gold were sacrificed to Xipe, the patron god of the goldsmiths. Despite these very severe penalties, there were professional robbers. The arm of a woman who had died giving birth to her first child was considered a sovereign protection against being caught. Robbers also considered that Quetzalcoatl was their protector. When stealing at night a robber would knock twice on the ground and the lintel of the house he was going to enter, for he believed that this would cause the inmates to sleep soundly while he was robbing them.

Those who were hungry were allowed to pluck two or three ears of corn as they passed the fields, but should a man take a large quantity of corn or maliciously uproot plants in the fields, he suffered death. A man could only be condemned for adultery if there were independent witnesses, and a confession was made by the

guilty party. The punishment was death by stoning in the public market; either stones were thrown by the general public or a heavy stone smashed in the offender's skull. Members of the nobility were accorded the privilege of being executed in private, hanging being a common form of execution in this case.

A man who killed his wife for adultery was punished with death, the law maintaining that no private individual had the right to mete out justice. Other crimes punishable by death were the moving of boundaries, the peculation of the property of a minor, the wasteful spending of a patrimony, and witchcraft. In the last case the guilty person was sacrificed. Drunkenness in the case of a young man was punished by death by garrotting, while a person of importance was deprived of his office, for, except during festivals, only old people were allowed to get drunk with impunity. A high priest found guilty of committing some crime or failing to remain celibate was exiled. Any member of the nobility who made use of the insignia of the chief ruler in a dance or battle suffered death and the loss of his property.

The early sources are vague and contradictory on the Aztec judicial system. Probably small cases involving members of the same *calpulli* were settled by a gathering of the clan elders. Above this was a series of judicial courts, one, apparently, located in each of the four quarters of Mexico City and one in each of the important districts outside the city limits. These district

courts sat all day and every day. In each court a president assisted by two other judges presided over the session, and there were three bailiffs to see that the sentences were carried out. The judges were chosen from the ranks of the nobility, only men of proved trustworthiness, honesty and sobriety being eligible. They wore a distinctive dress and were maintained from the produce of special lands set apart for this purpose. Above these district courts was a single court of appeal consisting again of a president and two other judges. This was located in the chief ruler's palace, and its sessions apparently were held in secret. Here all cases were heard in which members of the nobility were on trial, and in addition appeals from the decisions of the lower court were considered. Once cases of appeal had been heard here and a verdict given, the sentence was carried out immediately with Gilbert and Sullivan celerity, the prisoner being executed without more ado, if such were the sentence—an example that might well be followed in this country.

The snake woman, the Aztec co-ruler, presided over a higher court; apparently this was to try appeals of the nobility from the decision of the appeal court, which for them was a lower court. The snake woman was assisted in his deliberations by thirteen elders. Some early writers state that the cases were depicted on paper, and the case thus put on record for transmittal to a higher court, but Aztec hieroglyphic writing was so clumsy that one can't conceive of much detail being noted in

such records. However, by the combined system of picture writing and glyphs it would be possible to record the prisoner's name, his crime, as for instance the theft of so many mantles, the town where the crime was committed, the name of the victim, and the sentence, if it were a case of death or some fine. No records of this nature have survived, but there is no reason to doubt that they were used as aids to memory.

In addition to the civil courts, there were special military tribunals that dealt with military crime, such as treachery and cowardice, the punishment for which was death. In the former case the whole family of the criminal was enslaved.

Slaves were sold in the market, the average price being twenty cotton mantles. Some, we have seen, were sold into slavery as punishment for some crime, while yet others, such as gamblers, of their own accord sold themselves to raise money to continue their gambling. Relations of traitors were also punished by the loss of their liberty. In Texcoco the laws seem to have been more lenient, and robbers, who could not repay what they owed or persuade their relatives to do so, were not killed but sold into slavery; and similarly the theft of maize was not punished by death but by slavery. Slavery, however, was different from our conceptions, since a slave might own property, and even possess his own slaves. Slaves, unless they were very poor, owned their own homes and in many cases could not be sold to another master. Apparently they were really more in the

nature of free men who were obliged to work at certain times for their masters without payment, and it was a common custom for masters on their death-beds to liberate their slaves; if this were not done the slaves passed to the deceased's heirs. Children of slaves, moreover, were free.

Often a family in desperate circumstances would sell one of the children as a slave, and after a certain period send a younger brother as a substitute. In this way all the children might serve a few years, but were the one serving as slave to die while carrying out his master's duties, the arrangement was considered cancelled; but were the son to die at home, another member of the family must replace him. Frequently the owner would marry one of his slaves, and many cases occurred of a widow marrying one of the slaves she had inherited from her deceased husband. This clearly shows that no stigma attached to slavery. A man who succeeded in catching an incorrigible thief, or one who had committed some very serious crime was given his captive as a slave. Incorrigible slaves wore wooden yokes, and might even be sold for sacrifice, although such punishment was rare.

There is no information as to the exact duties of male slaves, but in all probability these were in most cases confined to helping their masters in their farming. Probably most of the time they only worked on occasional short jobs, while at sowing and harvest times their services were required for longer periods. Female

slaves, one supposes, helped their mistresses in their domestic duties for a short daily period. In any case this mild form of slavery does not appear to have been considered a very severe hardship, since many persons voluntarily sold themselves to obtain the equivalent of money for fairly trivial purposes.

A slave who had been forced to wear the wooden yoke for incorrigible behavior was set free if he could reach the palace of the chief ruler. A slave escaping in this manner could not be impeded in his flight by any one save the owner or his sons. Indeed, any one else who tried to stop him was himself liable to slavery. The palace guards were not allowed to prevent his entrance, and once inside the building, he was free.

In time of war all men of military age were eligible for service, each calpulli supplying a force which fought as a unit of the Aztec army, but in addition to these civilians, whose military interest was secondary to their civilian occupations, there were certain military classes, that might be loosely compared to the orders of knight-hood in mediæval Europe. Candidates for these orders were trained in the youths' school, and ascended in rank according to the number of prisoners that they took. The initiation into the very high rank of Tecutli among the Tlaxcalans is described in great detail by Torquemada.

The initiate had to be of high rank and of a certain age. Before the ceremonies the parents and relations of the young man might spend as much as three years

collecting wealth in the form of clothing and jewelry. On a favorable day, indicated by the priests, all persons of importance were invited to the opening ceremony. Accompanied by his relations, the young man ascended the pyramid of the war god Camaxtli, and knelt down in the temple. The high priest then pierced his nostrils with a sharpened eagle's claw and a sharpened jaguar's bone, and thrust jet (basalt?) beads into the wounds. The eagle and jaguar symbolized the two highest warrior ranks. At the conclusion of this ceremony the initiate had to submit to blows and insults from his companions. His clothes were torn off, but he was not permitted to protest or defend himself from the blows rained on him.

Later he was conducted to the abode of one of the priests. Here he sat on the floor until nightfall, when a low stool was brought for him. The others present at the ceremony banqueted in front of him, but apparently he was not allowed to participate. After their departure two or three seasoned warriors remained with him. He painted his body black, made frequent offerings of copal incense and blood drawn from his body with maguey thorns. During the first four days the initiate was only allowed to sleep for very short intervals, the warrior instructors pricking him with the maguey thorns if he slept more than the allotted short intervals. In addition to this he was only allowed to eat once every twenty-four hours, the solitary meal usually being eaten at midnight after a round of the temple for sacrificial

purposes. It consisted of only four small balls of maize none of them larger than a nut.

At the end of the four days the initiate returned to the temple of his calpulli, where he continued his penance and instruction for a period of a year under less severe conditions. During this time he was not allowed to visit his house. At the end of the year a lucky day was chosen for the completion of the initiation ceremonies. To obtain this the coefficients of the day of the initiate's birth and the day of the ceremony must, when totalled, reach an odd number. (Chapter VI.) Nobles from far and wide were invited to the ceremonies, and in front of the seat of each one were heaped costly gifts. The initiate was again carried, amid dancing and music, to the temple of Camaxtli, where his simple clothing was taken off and replaced with costly garments carrying the symbols of the order into which he was being initiated. His hair was tied with a red ribbon, from the ends of which featherwork hung, and a bow and arrow were placed in his hands. The ceremonies concluded with a great banquet, in which sumptuous presents were distributed among those present according to their rank. Sometimes the final ceremonies were postponed until sufficient resources could be collected to meet these requirements. The membership was restricted to those of considerable wealth, who had shown particular bravery in war or had a high reputation as statesmen. Candidates had also to attain a certain age before they were eligible for election.

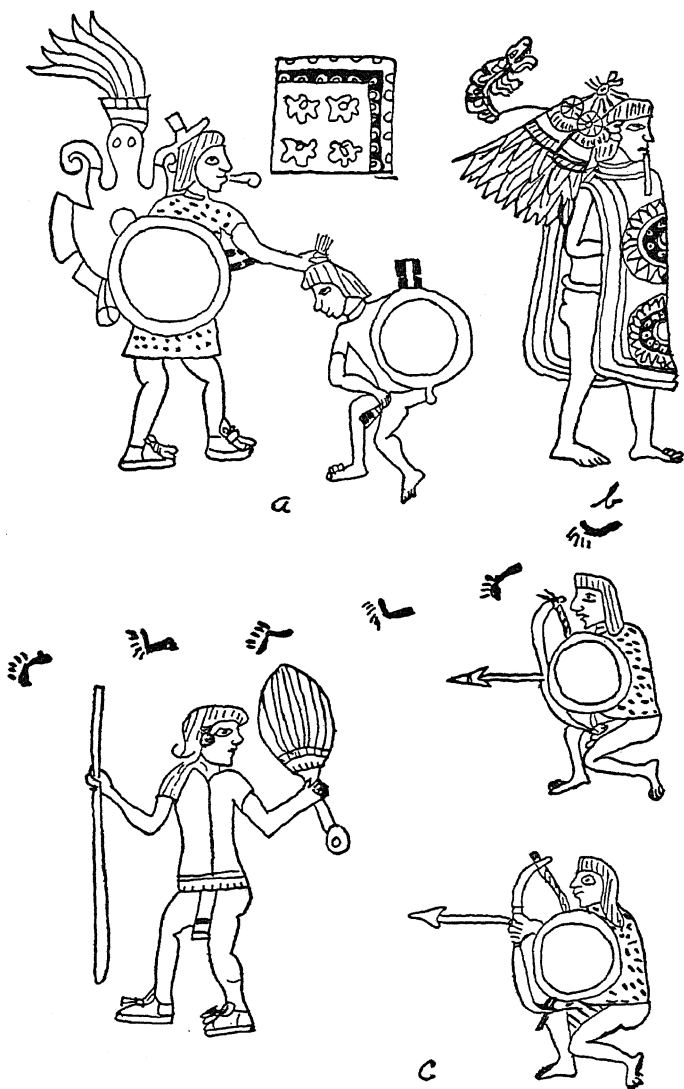


PLATE XII. WARFARE

a, Warrior capturing prisoner; *b*, Warrior whose dress shows that he has captured several prisoners; *c*, Enemy tribesmen attacking merchant symbolized by his fan and stave. Mendoza Codex.

As already stated (p. 43), young warriors graduated from the training colleges. Those of high birth passed through the more rigorous Calmecac, the others received their training and education in the Telpochcalli, or clan school, of which each calpulli possessed one. The former were supposed to be officers in the making, but it is doubtful if such a rank as an officer in our modern sense of the word existed. Probably, however, the recruits from the Calmecac fought apart as a group, at the same time supplying trained leaders to the calpulli brigades.

The stages by which a young warrior won his spurs have been briefly described in the passage cited, but there appear to have been innumerable stages of promotion to higher honorary rank, each exploit carrying with it certain very prized privileges of dress and ornament. The right to wear eagle or ocelot skins was the highest reward of this nature. One early Spanish writer states that only members of the nobility were eligible for the "Eagle Order," but one suspects that in this respect he has fallen into the common error of early Spanish chroniclers of imputing a non-existent aristocratic distinction in accordance with European notions. It is often difficult to estimate exactly how democratic was the Aztec state at the time of the conquest. It is clear that it was in process of evolution from a loose democratic federation of clans into something not far short of a feudalistic empire. If the Spaniards had arrived a century later they would undoubtedly have encountered

the latter. As it was they viewed a transitional stage in which a militaristic aristocracy was gradually gaining control from the clans.

The Aztec army was composed of divisions based on the clans. Each calpulli sent its own division, thus forming a force of twenty divisions, each with its own insignia and leaders. Probably, too, each calpulli was responsible for its own equipment and commissariat. The calpulli divisions were grouped in units of five calpullis corresponding to the four quarters of the Aztec city-state, and these with their respective leaders were under the orders of the chief ruler, or king, as the Spaniards erroneously called him. The chief ruler could not declare war of his own accord, for such a decision was a prerogative of the chief council.

Wars were declared to obtain prisoners for sacrifice, to avenge insults, particularly attacks on merchants, and invariably on the selection of a new ruler. Once the chief council had decided on hostilities, spies were sent into the territory to be attacked. On their return with reports as to the disposition of the enemy and information on the country to be traversed, war was declared, on a day considered suitable by the astrologers, by placing weapons, cotton cloaks, or eagle down in the enemy's territory. The advance to the attack was also made on a propitious day. There was little room for strategy, since battles were usually fought in specially chosen spots on the frontier of the country attacked. Here whichever army arrived first awaited the arrival

of the enemy. The higher leaders carried banners, the poles of which fitted into a box-like contraption attached to the back. Sometimes these were of gold. The raising of these on high was the signal to attack. A Mexican army drawn up for battle must have presented a picture rivalling in color and gallantry the tournaments of mediæval Europe.

In addition to the proud wearers of the eagle and ocelot skins, other warriors were clad in costumes of bewildering color. Some wore dresses of yellow feathers, others of green feathers bedecked with gold. The chief ruler wore a costume in which red, yellow, vermilion, blue, and green feathers mingled with ornaments of gold and jade. On his back he carried a golden image, the body of which was made of gold, while the wings, which were shaped like those of a butterfly, were of green feathers. This represented Itzpapalotl, the butterfly god, apparently a god of battle. The common soldiers usually wore a kind of quilt of thick cotton, which served as armor. Warriors who had distinguished themselves in previous combats wore their distinctive insignia on the outside of these, the designs being frequently worked in feathers.

In addition to the cotton armor fighters defended themselves with shields. These were usually round disks of wood covered with hide, and, when owned by members of the warrior orders, were decorated with featherwork and sometimes jewelry. There were also oblong shields, possibly made of slats, which could be

rolled up into a small compass when not in use. Heads of the nobility were protected with wooden helmets almost buried from sight below masses of feathers and other decoration.

For long-range fighting bows and arrows were employed as well as spears hurled with the aid of a spear-thrower. This last was a thin piece of wood a little over a foot long with two holes of the diameter of a finger set on each side of it, close to the front. The top surface was grooved, while at the butt a small point projected into the groove. The spear was laid in this groove with its hollowed butt resting against the point. With the first two fingers of his hand passing through the holes, the thrower was able to cast the weapon with greater force, the implement acting as an extra arm. The implement still survives in a few localities in Mexico as a hunting adjunct. The spear points were of obsidian or flint. Slings were also employed for hurling stones.

For close fighting wooden swords were used. Into both edges of these were set a number of blades of stone or obsidian that imparted a cutting edge. The blades were glued into position with a mixture made of a root of a tree pounded up with a certain sand and birds' and bats' blood. Bernal Diaz, himself a soldier and a keen observer of military matters, writes that these blades had a better cutting edge than the steel swords of the Spaniards. These Mexican swords were carried suspended from the wrist by a leather thong, so that they could not be snatched out of their owner's hand in combat.

Before engaging in battle the hostile forces frequently exchanged insults and goaded each other on with derogatory gestures. The whole of the army was not engaged at one time, forces being held in reserve to replace the tired fighters, who retired from the combat to eat and rest. The forces advanced to the attack amid the din of shouts, the blowing of conch-shell trumpets, and the beating of drums. This together with the gruesome paint with which the warriors bedecked themselves helped to inspire the enemy with terror. Ambushes were not infrequently used in battle, and it is said that the Mexicans were adept in concealing themselves. Pits were dug in the ground. In these warriors hid, covering themselves with straw and grass. Other soldiers pretended to flee in panic, and after the enemy had passed in triumphant pursuit the hidden warriors emerged from their concealment to attack the unwary pursuers in the rear.

Most of the fighting was carried on at close range, for the object was to capture prisoners rather than to slay as large a number of the enemy as was possible. The first prisoners captured were immediately sacrificed on the battlefield, but the rest were reserved for later sacrifice. Where a dispute arose between two warriors as to which had captured a certain man, the prisoner himself was questioned, and his testimony served to settle the question. The Aztecs and confederate states were lifelong enemies of the Tlaxcalans, but they claimed that they never completely subdued the latter,

since they would be deprived of a future supply of prisoners if the Tlaxcalans were weakened to such an extent as to be unable to resist them. The historian Duran recounts that on one occasion the Cholulans challenged the Aztecs to battle. The challenge was accepted and a battle fought, but after the combat had lasted all day neither side was victorious. Next morning the Aztecs sent messengers to the Cholulans to enquire if they wanted to continue the fight. The Cholulans replied that their gods were satisfied, presumably with the captives already taken. Both armies then marched home.

On the other hand, if the war was waged to subdue a revolt or to force a tribe to pay tribute, the fighting continued until the enemy was entirely routed, and their capital taken. In the hieroglyphic codices victory is shown by a picture of a burning temple and the glyph of the captured city in which it was situated.

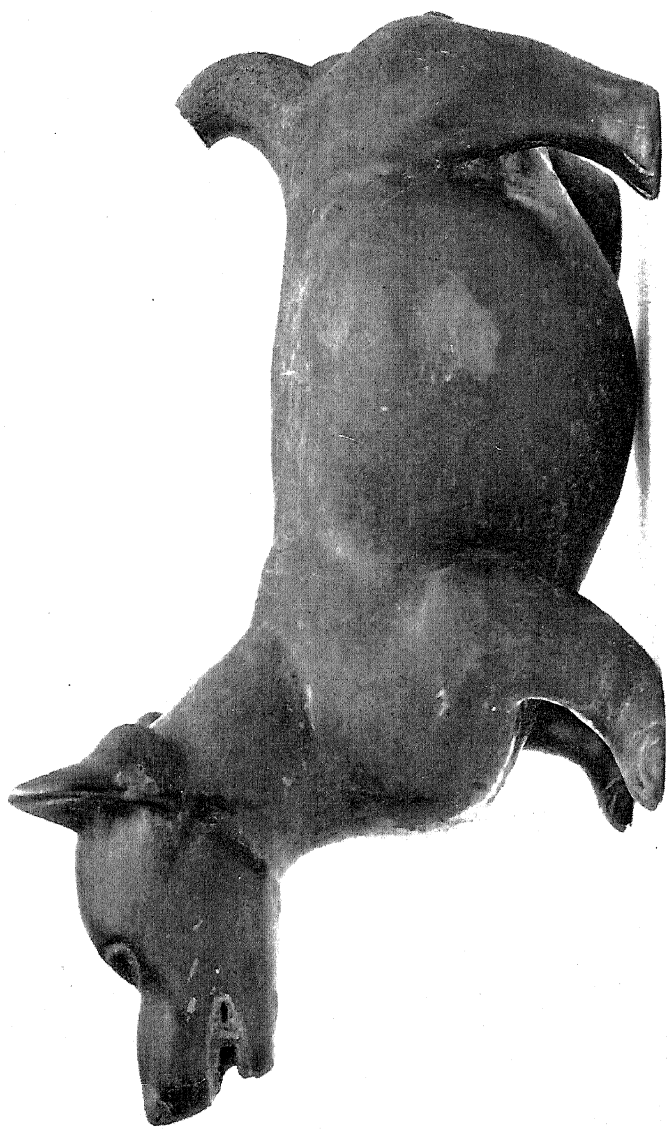
The troops were accorded a triumphal entry to the city on their return from a victorious campaign. Priests censured the triumphant warriors with copal, and the whole population turned out to witness the arrival of the warriors with their captives. Poor people used to visit the homes of wealthy warriors to sing their praises, and were rewarded with presents of food, drink and clothing as well as a small share of the spoils. Armies of the allied nations of Texcoco and Tlacopan always took the field with the Aztecs, and the war booty was divided among the three nations, two-fifths going to

the Aztecs, two-fifths to the Texcocans, and one-fifth to the Tlacopanecs.

Were the campaign a failure, the defeated army was welcomed in silence on its return, while the priests, who went out to meet it, had their hair unbound, since this was a sign of mourning or sorrow. Wooden statues were made of those warriors of noble birth who had fallen into the enemy's hands and had been sacrificed, or whose bodies had not been recovered. The statues were treated just as though they were the bodies of the dead warriors. They were dressed in costly clothing, bedecked with jewels, and then burned to simulate the cremation ceremonies of the Aztec nobility. Slaves were also sacrificed on this occasion as in the usual cremation of persons of wealth.

Tlaxcalan territory was defended by great defensive walls. These were made of mortarless stone, and are described as being twenty feet wide and nine feet high. On top was a breastwork manned by the defenders. At the occasional gateways the wall was doubled for a distance of some forty yards, the passageway which ran between this length of double wall was only ten paces wide, and consequently was difficult to force.

Night fighting was very rare, but not entirely unknown, for the battle of *noche triste*, in which the Spaniards were severely punished on their retreat from Mexico City, was, as the name implies, fought through the night. The Spaniards taken prisoner in this fight, as in others, were sacrificed. On one occasion the Spaniards



Courtesy of Field Museum, Chicago

PLATE XIII. POTTERY DOG, COLIMA

found in a temple in the Huastec country the heads of some of their comrades who had been captured. The heads had been skinned, and the tanned skins placed on the temple walls. The heads of sacrificed prisoners were frequently skinned and placed on poles. Eyewitnesses describe them as wrinkled up and shrunk dry to the size of children's heads. One is reminded of the Jivaro shrunken heads of Ecuador, but there is no information as to whether these Mexican heads were purposely shrunken. This is possible, but not probable, since if they had been purposely shrunken by some method similar to that used by the Jivaros, they ought not to have had a wrinkled appearance.

Usually the captor kept the hair of his prisoner as his trophy, but little golden trophy heads were also made.

While their menfolk were at the war, the women played their part to insure victory. As long as the army was in the field the women abstained from washing their faces, although the rest of the body could be washed as usual. Luckily campaigns were seldom of long duration. Early in the morning, at sunset and at midnight the women made small tortillas and other maize dishes which were offered to the household gods to protect the lives of their husbands. They also took bones of previous captives of their husbands, and hanging them from a beam, censured them and the household deities with copal incense.

The prayer offered on this occasion was a simple one.

"Lord of all that has been created, of the heaven, the earth, the air and the sun, the water and the night and day, have pity on your slave and servant, who traverses the woods and valleys, the plains and broken country offering you his sweat and breath. He is your eagle and jaguar, who without rest or repose spends this miserable life in laboring in your service. Lord, I pray and beseech you that you spare his life for some time yet that he may enjoy this world. Hear me, Lord." The description of the man as eagle and jaguar refers to his warrior rank (p. 213).

Wars, as has been said, were frequently caused through trouble with merchants or failure to pay tribute. The Aztecs fought one campaign because the enemy refused to pay a tribute of a certain kind of sand that was found in their territory, and was particularly good for polishing stonework.

The merchants, who directly or indirectly were the cause of many wars, formed an important and privileged caste in the Aztec social organization. They had their own deity, Yacatecuhtli, and formed a highly honored and in some respects almost independent group within the tribe, possessing their own judges who settled independently disputes between members of the guild. Yacatecuhtli was depicted as a merchant travelling with staff in hand. He was clothed in a blue shoulder cape and wore gold ear-plugs. His face was painted red and black, and in his free hand he carried a yellow and blue shield. He was the senior deity of a group of six

brothers and one sister. In the month Panquetzaliztli the merchants made a feast in his honor of great sumptuousness, as befitted their wealth, sacrificing many slaves, whom they purchased in the slave market of Azcapotzalco.

Merchants were often absent for very long periods on trading trips, their absences sometimes exceeding a year. During a merchant's absence his wife and children only washed their heads once in every eighty days. The traders travelled in large groups accompanied by porters carrying the merchandise on their backs with the aid of a tump line. Soldiers were sometimes sent in their company to protect them from hostile tribes and to gather military information. The travellers gave a feast to the old merchants before their departure, particularly to those who had retired from active trade owing to age. A good day was chosen for the start of the enterprise, the sign 1 Coatl being considered particularly lucky for an enterprise of this nature, for often merchants would defer their departure for long periods to await the arrival of this lucky day. It was considered very unlucky to look back once the departure had been made.

The wooden staff each merchant carried was an object of particular veneration, and was believed in some way to personify the patron deity Yacatecuhtli. At the end of the day's journey these staffs were piled together. Each merchant drew blood from his tongue and other parts of his body to sprinkle on them, and copal incense was also burned in front of them.

Groups of merchants regularly traded to the southern limits of modern Mexico and even beyond, passing into western Guatemala. Indeed, most of the business was done with this southern area, for here could be obtained tropical produce not found in the central plateau region. The quetzal bird, for instance, is only found in a small mountainous area on the Chiapas-Guatemala border. This general country was known to the Aztecs as Tzinacatlan, "The region of the bats." At the present time part of Chiapas is occupied by a Maya tribe known as the Tzotzils, *Tzotz* being the Maya name for bat. It is probable, therefore, that the Aztec name Tzinacatlan referred to their territory. Merchants who traded in this country spoke the language perfectly, and disguised themselves as natives in order to trade. Products of the plateau country such as obsidian spear-points, cochineal, red ochre, rabbit-skin cloaks and bells were bartered for quetzal plumes, jaguar and other skins and amber.

The traders ran a considerable risk in penetrating this and other distant lands where Aztec influence was not dominant and the natives hostile. Those, whose disguise was penetrated, were summarily executed. In that case the deceased's relatives burned a wooden statue of the unlucky man, simulating the usual cremation ceremonies as in the case of a warrior slain in enemy territory (p. 124). Large quantities of cacao were also brought from the southern coastal areas, and jade from the Guerrero-Oaxaca region. Much gold also reached

Mexico City from the Oaxaca region, either in trade or in tribute. It is possible that cotton capes from Yucatan penetrated to Mexico City, for these were sent to the Vera Cruz area from Yucatan in exchange for cacao beans, and it is not improbable that they were re-exported from the Totonac towns of Vera Cruz to the cities of the Valley of Mexico.

Returning merchants timed their arrival home so that it would coincide with a lucky day. A great feast known as "The washing of feet" was held to celebrate the happy conclusion of a long trip. Each merchant placed his staff in his calpulli temple, treating it as though it were Yacatecuhtli himself, and making offerings of food, flowers and copal incense.

There were certain markets specializing in special products. Cholula was the centre for precious stones and valuable feather-work; buyers of textiles and richly decorated gourds journeyed to Texcoco; at Azcapotzalco and Izocan were special slave markets; while at Acolman there was a great dog market. Eyewitnesses state that even after the conquest when the demand for dogs for sacrifice had naturally ceased, and even the eating of dogs was much frowned on by the church, the number of dogs on sale at this market seldom fell below four hundred. Markets were held every five days, and all persons living within a radius of about ten miles were expected to attend, or the local market god might be expected to take their non-attendance as a slight, and vent his wrath on the negligent.

There was a peculiar superstition that it was very unlucky to sell en route anything that one was taking to market. Indeed, the superstition was supported by a law forbidding such a transaction. This old superstition seems to have lingered on, for the writer has encountered the same unwillingness to sell en route to the market among the modern Indians of Central America, although a good price was offered and a long journey to market might have been avoided.

Most of the frequenters of the market were women, who seem to have combined business with pleasure, meeting their friends there, hearing the news, and indulging in a good gossip, as in most parts of the world. Father Duran, an early priest, whose life was one long worry trying to stamp out the old practices, has the following amusing paragraph with reference to the pleasure with which the Indian women travelled from market to market: "I think that if one was to say to one of those Indian women who love to wander round the markets 'Listen, to-day is market day in such and such a place, which will you to choose, to go straight to heaven or go to the market?' I suspect that she would say 'Let me first see the market, and after that I will go to heaven,' and she would be quite contented to lose that period of Glory just so that she could go to the market, and go wandering round here and there without any purpose save to satisfy her greedy desire to see it."

The markets were invariably placed close to the prin-

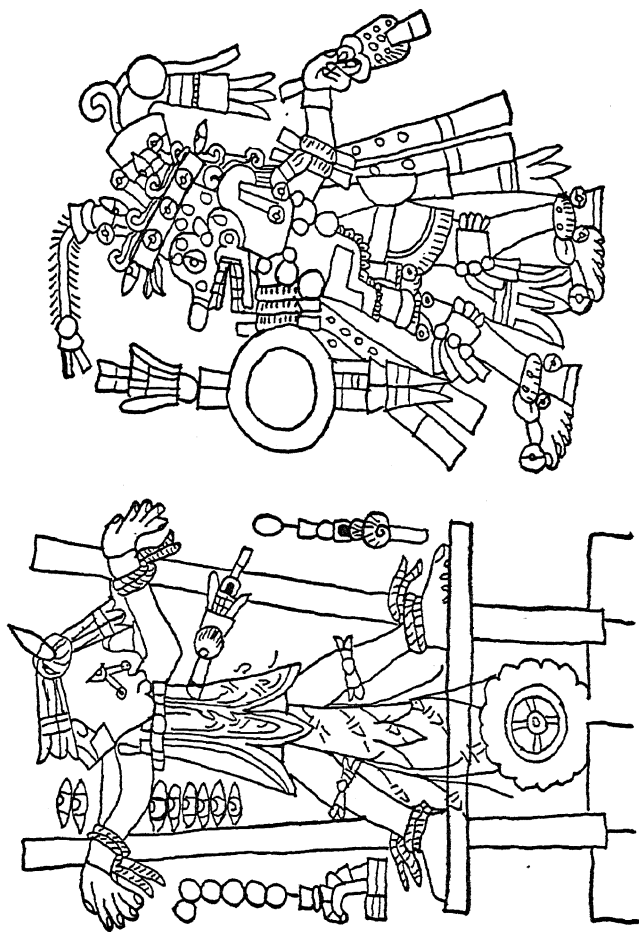


PLATE XIV. SPEARING SACRIFICIAL VICTIM

The victim, tied to a scaffold, has been pierced by a spear hurled from the spear-thrower of the warrior on the right. The latter wears a mask representing the death god and carries a shield and two spears. Zouche Codex.

cipal temple, and market day always coincided with a feast in honor of the local patron god. The market itself was walled in, and on the walls were set round stones with a centrepiece resembling the sun, around which were other carvings. This apparently must have represented Yacatecuhtli, the god of merchants. Offerings of flowers and food were made here by the vendors and buyers. Disputes that arose in the market were taken to a council of twelve old men who served as judges.

Each clan had its own market, and in addition there was a central market situated not far from the present position of the cathedral of Mexico City. A description, quoted from the conquistador and writer Bernal Diaz, has already been given of the products sold here (p. 75). Another early writer on ancient Mexico says that this main market was held every day, and that it held as many as one hundred thousand people. This figure is surely an exaggeration, but as the central market for the whole Aztec confederation, no doubt it was always thronged.

A circular fan served as the badge of office of the merchants, and this was regarded as a general mark of travel. It has been said that trade follows the flag, but in Mexico the flag followed trade. In addition to the important information on distant lands that the merchants were able to obtain on their travels, and for which they were well rewarded, the massacre of a party of merchants served the Aztecs as a valid excuse for

imperialistic expansion in the same way that the murder of missionaries led to annexation of territory by the European powers in the nineteenth century. (Plate XII.)

Through archæology we can obtain confirmation of the early accounts of the wide distribution of articles of trade. In what is now the Republic of El Salvador a special clay containing a percentage of lead occurs. This when fired acquires a dull metallic lustre varying from blue-green to orange according to the intensity of the firing. The effect is very pleasing. Pottery vessels made of this clay soon acquired a high reputation on this account over a wide area, and a large export trade was built up. Quite apart from the clay, the shapes of the vessels can be recognized as of local patterns, pear-shaped jars, animal forms and vases with heads of the Tlaloc gods predominating. The extent of this trade is shown by the discovery of vessels of this type in localities as far apart as Yucatan, Jalisco, and the Vera Cruz District, while they are found in large numbers all over the Highlands of Guatemala and also in Honduras. The shapes clearly indicate that the finished vessels, and not the unworked clay, were traded. Copper clapperless bells of the same type are found over as wide an area, and, according to one of the early writers, were manufactured in the Valley of Mexico. Copper bells of this type have even been reported from a Pueblo ruin in the United States. The graceful pottery of Cholula also travelled far and wide. Trade between Cholula and Oaxaca seems to have been consider-

able, since much of the pottery of this latter region closely resembles that of Cholula in colors and designs. On the other hand the people of Cholula wore tunic-like ponchos of cotton, resembling those used by the Zapotecs, and it is probable that this fashion was introduced from Oaxaca.

CHAPTER V

RELIGION

Bigotry of Early Writers. Agricultural Gods. Tlalocs. Chalchihuitlicue. Chicomecoatl. Centeotl. Xochipilli. Xipe Totec. Xochiquetzal. Tlazolteotl. Coatlicue. Drinking Gods. Sky Gods. The Sun God. The Moon. The Planet Venus. Rulers of the Underworld. Mictlantecutli. Mictecaciuatl, His Spouse. Miscellaneous Gods. Huitzilopochtli. Mixcoatl. Tezcatlipoca. Quetzalcoatl. Creation Gods and Legends. Age of the World. Human Sacrifice.

^{Center}
~~MEXICAN~~ civilization was based on agriculture in general, and the cultivation of maize in particular. Although in later times we get a picture of a highly organized militaristic state, whose rulers were surrounded by pomp and wealth not unworthy of some eastern potentate, we must not forget that the background of this picture is formed by the fields of maize. Europe was agog in the sixteenth century with tales of wonder from the New World. Such matters as the everyday life of the people were of little import. What mattered were the stories of overwhelming wealth, of new products and bizarre customs. ~~Mexican~~ history is clouded by this wild enthusiasm, and, unfortunately, accounts of native religion are tinged with its consequential stressing of the new and strange. ⁴

^{See} ~~Mexican~~ religion, with its holocausts of sacrificial victims, appears on the surface an ugly and barbaric travesty of our conceptions of the relations between man

and the heavenly powers, but we must remember, too, that we are looking at it through the jaundiced eyes of sixteenth-century bigots, who would have considered that they were in danger of falling into the clutches of his satanic majesty were they to describe features of ~~Mexican~~⁴³⁶ religion in a favorable light. These zealous writers also tend to cloak their accounts of Mexican religion in classical raiments. They have left us lists of gods, grim accounts of grim ceremonies, and involved descriptions of sacerdotal beliefs, but we have no account of ~~Mexican~~⁴³⁷ religion from the layman's viewpoint. Were such an account to exist, it would surely paint Mexican religion in a better light, and would probably show that many of the names given as those of distinct gods were merely variant names of a few important deities. Then, too, we could get the Mexican man-in-the-street attitude towards human sacrifice.⁵

Although to us human sacrifice is the most horrible feature of ~~Mexican~~ religion, we must remember that it took the place of slaughter in war, for Mexican battles were fought to capture prisoners, not to inflict slaughter on the enemy. Had not human sacrifice existed, many times the actual number of sacrificial victims would have perished in the fighting. It was due to this practice that the Spanish losses in the capture of Mexico were so insignificant. In a sense they were not playing the game in slaughtering their enemy on the battlefield. Furthermore, sacrificial victims could count on a direct passage to the joys of the next world, and for this reason many

warriors desired to finish their lives on the sacrificial block, though like the Irishman and heaven, they were in no particular hurry to get there. Probably there was not a single Mexican fighter who would not have preferred death on the sacrificial block to death in battle. Secondly in Mexican eyes human sacrifice was an absolute necessity, to keep the gods propitiated, and to ensure good crops. Aztec religion called for real devotion and abnegation; buttons in the collection were outside the Mexican's concept of religion. ⑥

The ancient Mexican was not an idealist. He looked on his gods as endowed with the same mixture of friendliness and ill-will as he saw around him. The gods, like most men, did not believe in giving something for nothing. If one expected their favors one should give something of value in return. ~~Hence the human sacrifices and the offerings of food, copal incense, rubber, and other precious objects.~~ ⑥

Agricultural Gods

In view of the importance of agriculture, it is not strange to find agricultural gods forming the majority of the occupants of the Mexican pantheon. They, in turn, can be divided into three classes—gods of rain, gods of the growing plants, such as maize and maguey, and gods of the actual soil. Deities of all three classes are closely connected, and frequently their functions and attributes overlap. ⑦

The Tlalocs were innumerable mountain gods, under whose control were the rains, thunder, lightning, snow and hail, and, by extension, rivers, lakes and wells. Any local hill might be considered a Tlaloc by the residents in its immediate vicinity. At the same time there was one Tlaloc who was considered the leader, and three others of importance, who with him ruled the four world directions. The relationship between these different Tlalocs is somewhat obscure, but sometimes they appear to have been looked on as a single deity in a manner resembling the orthodox Christian belief with regard to the Trinity. It is possible that the confusion is due to the clashing of two different viewpoints—that of the priest and layman. The former may have looked on the Tlalocs as a single god; the latter as being innumerable. §

Be that as it may, the importance of the Tlalocs is shown by the fact that five of the major annual festivals were dedicated to their worship. (Chap. VI.) These festivals clustered around the dry season, and three of them, at least, were to intercede for rain for the crops. These fell in the dry months of February, March, and May when damp soil was required for planting, and, later, rains to aid the young maize plants.

A feature of the worship of the Tlalocs was the sacrifice of young children, and the victims sacrificed to these gods were generally supposed to weep. This is an example of sympathetic magic combining with religion, for the shedding of tears was believed to compel the



Courtesy of Field Museum, Chicago

PLATE XV. (*Left*) CHICOMECOATL, MAIZE GODDESS, VALLEY OF MEXICO.
(*Right*) A WARRIOR IN COTTON QUILT ARMOR, JALISCO

RELIGION

sending of rain. Most of the Tlaloc festivals were held on mountain tops, but at the festival of Etzalqualiztli (p. 182) the ceremonies took place on a lake, emphasizing that the Tlalocs were also lords of the rivers and lakes. As rulers of the clouds and hail, they were also accorded worship. In the abode of the Tlalocs stood four great jars. In one was stored good rain which aided the crops; in the second rain which produced mildew and rust in the crops; in the third hail and sleet; and in the fourth rain which prevented the crops from drying so that they could be collected. From these jars the Tlalocs drew off whatever kind of rain they wished to pour down upon the earth from their homes on the mountain tops. 9

The chief Tlaloc was supposed to be married to Chalchihuitlicue, a goddess of water, and, although the information is nowhere given, one would suspect that there were a number of humbler counterparts of Chalchihuitlicue, each guarding her own stream, and serving as a faithful spouse of one of the junior Tlalocs. The Mexicans were a practical people, and doubtlessly they had some such arrangement to ensure the domestic bliss of the other Tlalocs.

These rain gods are among the most easily recognized of Mexican deities, for they are invariably shown with very distinctive circles around the eyes and long curved tusk-like teeth. In addition a long scroll often emerges from the mouth, either at the side or curling upwards in front of the nose. (Plate XVII, *b.*) The dress is

usually painted blue or green to represent water, and the face black, possibly denoting the rain-bringing clouds. The circles around the eyes represent snakes, and in some representations of the gods are thus shown. The snake was intimately connected with rain both in Mexican and Maya belief, possibly because rain seems to bring out the snakes from their hiding places. Similarly frogs also symbolized the Tlalocs, probably because the croaking of frogs announces the imminence of rain. Indeed, Maya tradition records that frogs formed the orchestra of the Chacs, the Maya equivalents of the Tlalocs, who were also closely associated with snakes.

The Tlalocs lived in a land called Tlalocan, whither went all those who had been buried, not cremated in the usual Aztec fashion. Those who had met death at the hands of the Tlalocs, either by drowning or being struck by lightning, as well as sufferers from certain diseases formed this class (p. 49). The close connection between the Tlalocs and fertility is shown by the belief that Tlalocan was a land of abundant crops and plenty. These gods were on the whole favorably disposed toward man, but could show their bad side by withholding the rains, sending them in too great abundance at harvest time or by sending hail to ruin the crops. ~~10~~

The worship of these primitive mountain-dwelling fertility gods undoubtedly dates back to early times, as tradition relates. The cult was probably initiated by the agriculturalists of the pre-Maya civilization, forming part of the cultural heritage passed on to succeeding

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civilization of both Mexico and Central America, the names of the gods alone varying from tribe to tribe. Images of Tlalocs are found all over central and south-

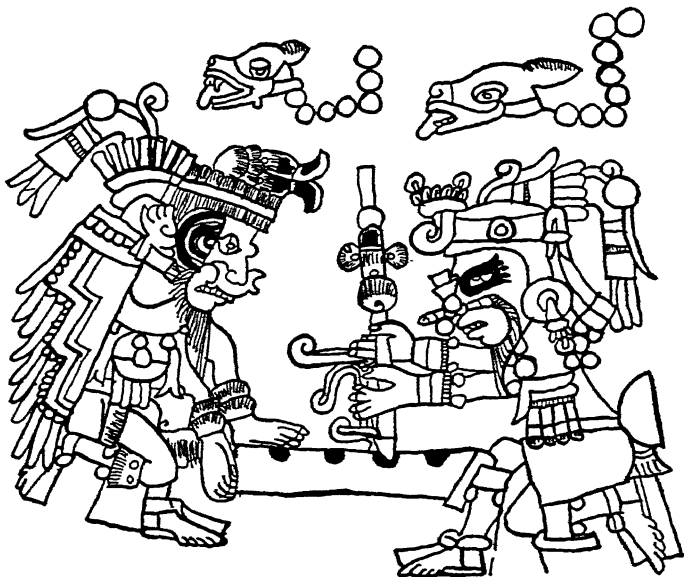



PLATE XVI. FIRE MAKING

The individuals "7 Dog" and "8 Deer" ceremonially kindling fire. Zouche Codex.

ern Mexico, and their worship extended as far as El Salvador. In this latter region pottery vessels with a Tlaloc face in relief were manufactured of a lead-bearing clay, and exported far and wide over Central America—an early example of American business enterprise.

The Tlalocs were, *par excellence*, the gods of the people as opposed to gods who found favor with the priests and nobility. 

Chalchihuitlicue, wife of the chief Tlaloc, was also a goddess of water, as the numerous secondary names such as "Foam of the water" and "Water which makes waves" indicate. The name Chalchihuitlicue means "She with the jade skirt" for she was said to wear a skirt studded with green jade ornaments to represent the water. As already suggested (p. 139) there may possibly have been a considerable number of subsidiary goddesses of the same name. Chalchihuitlicue, however, does not appear to have been directly connected with rain. She is recognizable both in statuary and in the codices by a peculiar tasselled cape, corners of which usually hang down in front and behind. Among the Tlaxcalans she was known as Matlalcueye, "She of the blue robe," and was believed to live on a mountain in that region.

Chicomecoatl, whose name means "Seven snake," was believed to be a sister of Tlaloc. She was a goddess of the ripening corn as her secondary name "Seven ears of maize" indicates. She is usually shown holding two ears of corn in each hand to typify abundance. (Plate XV.) She is almost invariably depicted as red in color, and this might suggest that she is associated with the early ripening red maize. Stone statues of her, which frequently still retain traces of red paint, are very abundant in the Valley of Mexico. In addition to

the ears of maize, she usually wears a square headdress, on which rosettes are set. —fl

Xilonen, whose name means "Young ears of corn," was probably nothing more than Chicomecoatl under another name, although the early Spanish writers speak of her as a separate goddess. Whereas Chicomecoatl was a goddess of the ripening maize plants as a whole, it is not improbable that she was known as *Xilonen* when considered not as goddess of the plant as a whole, but purely as goddess of the green ears of corn, and in particular those of the red maize. This is borne out by her name and by the fact that her festival fell when the maize was beginning to ripen. The victim who represented her was decapitated. Many of the victims of agricultural deities were sacrificed in this manner, which symbolized breaking off the ears of corn from the plant at harvest. The dress of the goddess in her guise of *Xilonen* typifies the young ears of corn, for her face was painted yellow and red to represent the two main species of maize, and a necklace of jade served to represent the green foliage from which the ears emerge. /

Centeotl was also a maize spirit, as his name "Maize god" shows. He appears to have been primarily the spirit of the yellow maize. His features and clothing were painted yellow and green, the colors of maize, as opposed to the red and green colors of Chicomecoatl. Although primarily the god of yellow corn, there appear to have been variants of his nature, where he is known as "Red Maize god" and "White Maize god."

Usually, however, he typified the yellow maize when it was ripening. He was considered to be the son of Tlazolteotl, an earth goddess, and the brother of Xochiquetzal, a goddess of fertility and flowers. Essentially a passive spirit, he was largely dependent on the Tlalocs, for without their aid he could not flourish. The deification of the different crops is met with all over the globe, and in a modified form still survives in many parts of middle America. 13

~~Xochipilli was the flower god, as his names "Origin of the flowers" and "Five flowers" imply. Although a god of flowers in general, he seems also to have been closely associated with the flowering of the maize. As this was an occasion for great rejoicing, he came to be also the patron of all forms of pleasure, such as feasting, dancing, gambling, and the ball game. Generally he may be said to represent abundance. Seler has suggested that he is Centeotl under a different guise, and it may well be that the two gods were to a certain extent confused. The Aztecs, like the Romans, were very hospitable to alien gods, particularly those of conquered peoples. In this way several fertility gods crept into their pantheon, among whom Xochipilli may be numbered. Both as god of flowers and as patron of revelry, he came to be connected with Octli, the intoxicant made from the maguey plant. His distinctive emblem is a comb-like ornament that runs from his forehead to the back of the head.~~

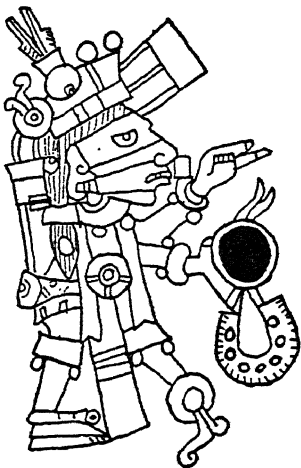
Xipe Totec, the god of human sacrifice, appears origi-

nally to have been a maize god, hailing from the neighborhood of Oaxaca. He was the god of sacrifice by flaying, and all victims slain in his honor were thus treated. As we know that he was originally connected with agriculture, it does not seem improbable in view of our knowledge of other symbolic sacrifices that the flaying of the victim represented the husking of the corn. This did not take place when the crop was gathered, for the ears were stored with their coverings of leaves in special granaries until required. This theory that Xipe was the patron of the husked maize is borne out by the fact that the heads of victims to be sacrificed to him were first shaved, symbolizing the removal of the beard of the corn when it is husked. Xipe, however, also came to be a war god. Such a connection evolved through the necessity of capturing victims for sacrifice to insure good crops. An account of the special festival of Xipe held in the month Tlacaxipeualiztli, which fell in March, is given on page 180. 17

Xochiquetzal, "Flower-quetzal feather," was the female counterpart of Xochipilli, being like him a deity of flowers, pleasure, song and dancing. By extension she was also goddess of sexual pleasure, and in this aspect also patroness of prostitutes. It is more than probable that the sexual aspect of her worship had its origin in fertility rites, intercourse having the effect of inducing better crops. The Tlaxcalans held a special feast in her honor in the month Quecholli. On this occasion all prostitutes and hermaphrodites, garbed in women's

dress, paraded for a sacrificial ceremony. Xochiquetzal was also the patron of weaving, and originally she appears to have been the moon goddess.

Tlazolteotl, an earth goddess, whose name means "Dirt goddess," was also called "Heart of the earth" and "Our grandmother" among a large number of minor names. That *Tlazolteotl* was primarily a maize goddess is shown by the decapitation of the girl who impersonated her, the employment of flowers and ears of corn at her festival, and by the fact that her face was painted yellow, the color of maize, and her dress was spotted with crude rubber, a symbol of the rain gods. Like Xochiquetzal, she was also a goddess of sexual intercourse, particularly in its lustful aspect. Strangely enough *Tlazolteotl* was the recipient of confessions. As one could only be absolved by her of great sin once in a lifetime, the more canny Mexicans waited till old age, when the temptations they might face no longer had their old appeal, before making their confessions. After consulting the *Tonalamatl*, the priest set a day for this event, and the penitent arrived with a new mat and copal incense to burn in sacrifice. If the sins were light, the penitent got off with a four-day fast, but if he had committed many grievous sins, he was ordered to march at night to the shrine of one of the drinking gods, and there make an offering. The penitent had to make this journey naked except for a paper loin-cloth. After the confession the penitent was given a certain piece of paper as a mark he had confessed. With this in his pos-



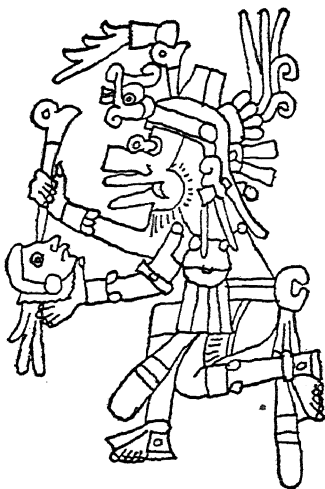
a



b



c



d

PLATE XVII. GODS FROM VARIOUS CODICES

a, Tezcatlipoca; b, Tlaloc; c, Mictlantecutli; d, Quetzalcoatl as Eecatl.

session he could not be tried for any offense he had committed prior to its receipt, for as he had been forgiven by Tlazolteotl, the person against whom he had offended must also forgive him.

Coatlicue, whose name means "Serpent skirt" is chiefly famous for the enormous stone statue of her, found under the Zocalo Plaza, and now in the Mexican National Museum. This statue shows her with her skirt of snakes, and her head formed by two snakes' heads placed snout to snout. Apparently an earth goddess, she was later connected with Huitzilopochtli. Tradition relates that she was a pious god-fearing widow. One day as she was doing penance on the summit of Coatepec mountain, a ball of feathers fell at her feet. Picking it up, she placed it in her bosom. As a result of this action she became pregnant. Her numerous children, seeing her condition, were very ashamed, for, not unnaturally, they did not put much credence in this strange story. After discussing the matter among themselves, they decided to slay their mother. When they came to do so, the unborn child issued fully armed from his mother's womb, and falling upon his half brothers slew every one of them. This miraculously conceived child was Huitzilopochtli, the Aztec war god. Apparently Coatlicue was originally a fertility goddess, for flowers and green corn were offered her in the spring, the festival concluding with songs and dances.

The *Ocili* gods, who were patrons of the Octli or pulque drink made from the sap of the maguey plant,

were considered to be four hundred in number. This number signified innumerable to the Mexicans in somewhat the same manner as the biblical term "Seventy times seven." The Mexicans considered these gods to be innumerable since they believed that the forms of drunkenness were without number. Originally, however, these gods were spirits of the maguey plant. They were known collectively as "The four hundred rabbits," since a rabbit symbolized drunkenness. Also since the Aztecs believed a rabbit inhabited the moon, the Octli gods came to be connected with the moon. In this aspect they are easily recognizable in the codices by a peculiar crescent-shaped nose ornament they invariably wear, the stone axes they carry, and a bell-shaped ear-plug. Only the old men were allowed to become intoxicated in ancient Mexico, hence the Octli cult was in their hands. A young man who became intoxicated, except on ceremonial occasions, was in danger of being put to death as a punishment. The principal Octli gods were Tepoztecatl, Patecatl, Mayauel, a goddess, Totochtin and Macuiltochtli.

Sky Gods

Tonatiuh was, as his name implies, the sun god. Frequently he carries a back-shield representing the sun with its rays. (Plate XX.) His hair is usually flame-colored and decorated with eagle's feathers, and as patron of the warriors, he often carries shield and spears.

The fertility gods, whom we have already briefly sketched, were the gods of the rank and file of agriculturalists who formed the backbone of the state. The sun god was the patron of the parasitic class of warriors and nobles, whose chief function, whether they realized it or not, was to supply sacrificial victims so that agriculture could continue unimpaired. The intervention of the sun as a direct aid to agriculture was little sought, for in Mexico he could always be counted on to shine sufficiently to ripen the crops, but the Mexicans seem to have looked on him as the *fons et origo* of all life. It was believed that his youth must be continually renewed by human sacrifice so that he might continue his daily pilgrimage across the sky. Hence the heart of every sacrificed victim was held up to the sky after extraction, even when the sacrifice was in honor of some other deity. Because of the close connection between human sacrifice and the sun, the warriors, who were responsible for the supply of sacrificial victims, were also closely tied to the sun, and after death were believed to join him in his daily progress across the sky from sunrise to mid-day. Beyond this point women who had died in childbirth, and so indirectly aided the upkeep of the sacrificial victim supply, accompanied the sun to his setting point. The connection of the sun with sacrifice may have originated from the belief that the sun was always thirsty, and forever sucking up moisture from the earth. The sacrifices then would tend to keep him satiated with blood so that he would not suck all

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the moisture out of the soil. At the same time blood gave him greater strength than he could ever obtain from water. Hence there was little danger of his losing his power to shine down and envelop the earth in his warmth. 15

Metzli, the moon, is depicted both as an old man and as a woman. The Mayas considered her feminine, and to be the wife of the sun. Both civilizations agree, however, in recognizing a shell as the moon's symbol. The Aztecs also believed that a rabbit was seated in the planet, and from this derives the connection with the Octli gods, who were known as "The four hundred rabbits" as explained on page 149. Little attention seems to have been paid the moon, although eclipses both of the sun and the moon were greatly feared. As already noted Xochiquetzal was in all probability the original moon goddess.

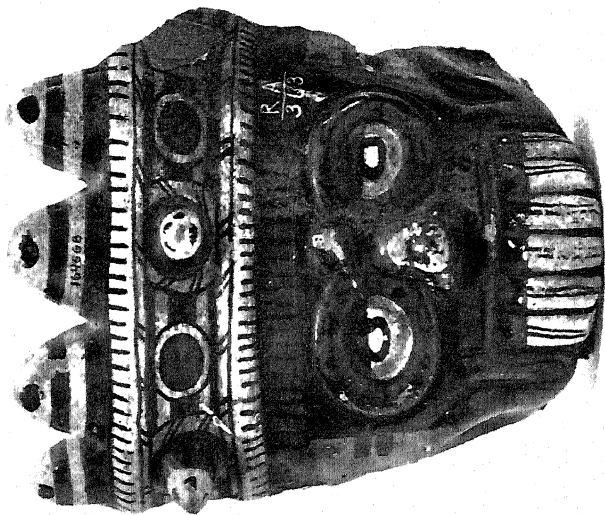
Tlauizcalpantecutli was the god of the planet Venus, recognizable by the five white spots on his face. (Plate XXIV.) The part played by Venus in Mexican religion and calendrical calculations is explained on page 202. His name means "Lord of the house of the dawn."

Rulers of the Underworld

Mictlantecutli, the Aztec equivalent of Pluto, ruled over Mictlan, the underworld abode of the dead, whither journeyed those who had not qualified as warriors to join the sun, or by burial to enter Tlalocan,

the paradise ruled over by the Tlalocs (p. 49). Although Mictlan was in the underworld and a land of darkness, it must in no wise be considered a place of punishment. The souls of the dead after many wanderings and adventures entered Mictlan four years after their death. On their arrival there they made some offerings to Mictlantecutli, and for this purpose suitable presents were interred with the ashes of the deceased. The ruler of Mictlan was aided in his duties by three assistants, duly provided with spouses, indicating, perhaps, that in the Aztec afterworld there were both marriage and giving in marriage. Mictlantecutli is usually shown with a skull in place of a head, or failing that the bared jawbone and fleshless jaws of death. (Plate XVII, c.) Frequently a flint knife is fixed in the fleshless nostrils, and crossbones are sometimes painted on his clothing. /6

Mictēcaciuatl, "Lady of the abode of the dead," was the wife of Mictlantecutli, and has the same distinguishing skeletal features. The abode of the dead of the Aztecs was vaguely considered to be in the north, whence the Aztecs migrated to the Mexican plateau land. Many primitive or semi-civilized peoples consider the abode of their dead to be in their original home, and the Aztecs appear to be no exception. Possibly their picture of Mictlan was based on vague traditions of North America with its long winter nights, for northern branches of the great Shoshonean linguistic group, to which the Aztecs belong, are still to be found in Mon-



Courtesy of Field Museum, Chicago
 PLATE XVIII. POTTERY MASKS FROM VALLEY OF MEXICO
 Representing Tlaloc (*left*) and possibly Tezcatlipoca

tana. The Zapotecs, on the other hand, considered their capital city Mitla to be built over the entrance to their Hades, hence its name. The Zapotecs, however, claimed that their race originated in this same region. '7

Miscellaneous Gods

In this small group are included several of the most important of the Aztec deities.

Huitzilopochtli was, at the time of the Spanish conquest, the tribal war god of the Aztecs, and in the eyes of the warrior-nobility class the most important god. His name has been variously translated as "Humming bird left-handed one," "Humming bird sorcerer" and "Humming bird of the south." According to tradition he was an early leader of the Aztecs during their wanderings prior to the foundation of Tenochtitlan, and after his death was elevated to divine rank as the tribal deity of the Aztecs. In addition to his functions as a war god, *Huitzilopochtli* was also a god of hunting. There is a great deal of doubt as to his exact functions. Doctor Seler, the great German student, was of the opinion that he was also a god of the sun and of fire, while Lewis Spence considers that he was originally a god of the maguey plant. He is recognizable by his dress of humming-bird feathers and by the spears, spear-thrower and shield he usually carries, as befits a god of war and hunting. Peculiar to this god was a strange weapon called the *xihcoatl* or fire snake, which was

shaped like a cross between a lizard and a snake. With this he was said to have slain his half brothers at his miraculous birth (p. 148).

The temple of Huitzilopochtli in ancient Mexico City was the greatest religious centre of the Aztecs. (Plate XIX.) A flight of 120 steps, flanked by balustrades formed by great stone snakes, led up to two temples on the summit of the pyramid. One of them held the statue of Huitzilopochtli, the other that of Tlaloc. In front of the temples was an open space, in the middle of which stood the sacrificial block some twenty inches high with a convex summit on which the victim's back rested. The remains of this temple can still be seen under Calle Escalerillas in the heart of modern Mexico City. A series of great stone snakes' heads which originally formed the bottom of the snake balustrades, and sections of stairways bear witness to the number of times the great structure was enlarged. In front of the temple originally stood rows and rows of racks, which were filled with the skulls of those who had been sacrificed. The high priest and assistant priests of the Huitzilopochtli cult were held in very high esteem among the Aztecs, since they interceded with Huitzilopochtli for Aztec victories. There is some doubt among the early Spanish chroniclers as to whether the statue of Huitzilopochtli that stood in the temples was of wood or stone.

Mixcoatl, which means "Cloud serpent," seems to have been nothing more than another name for Huitzilopochtli in his rôle of hunting god. It is possible that

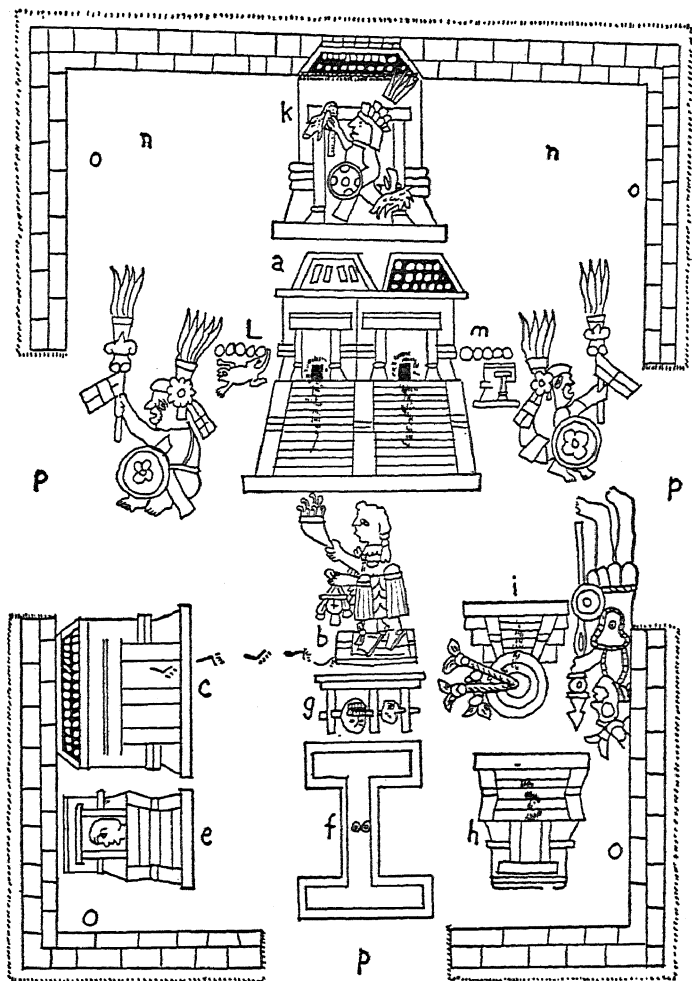


PLATE XIX. PLAN OF GREAT COURT, TENOCHTITLAN

a, Pyramid with temples of Huitzilopochtli and Tlaloc; *b*, Sacrificial altar; *c*, Priests' house; *e*, Warriors of the eagle hall; *f*, Ball court; *g*, Skull rack; *h*, Temple of Coatlicue; *i*, Stone for mock combats; *k*, Temple of Colhuacan; *l*, Date "5 Quetzpalin"; *m*, Date "5 Calli"; *n*, Dancing Patios; *o*, Wall of court; *p*, Entrances to court. After Sahagun and Seler.

he was a tribal god of pre-Aztec people, and after the consolidation of Aztec influence, he became confused with Huitzilopochtli. An account of the hunting feast held in his honor in the month Quecholli is given on page 189. He is depicted in the codices as wearing a black mask or painting across his eyes. Among the Tlaxcalans he was worshipped under the name Camaxtli. Every fourth year the feast held in his honor was of unusual magnificence. The statue of the god was dressed in robes of cotton and rabbit skins, new fire was made, and the sacrifices included birds, rabbits, snakes, alligators, butterflies and prisoners of war. In one Tlaxcalan town alone five hundred captives are said to have been sacrificed in this festival. The birds and beasts were offered, naturally, because of the deity's patronage of hunting.

Tezcatlipoca, whose name means "Smoking Mirror," was, possibly, the most important god in the Aztec pantheon. He has a score of minor titles such as "The youth," "He whose slaves we are," "Dreaded enemy," and "Obsidian." It would almost appear that Aztec religion was evolving towards monotheism at the time of the conquest, and that Tezcatlipoca was on his way to becoming the sole god of the nobility. He was believed to be omnipotent, invisible and ubiquitous. As an all-powerful god, he both gave and took away life. He was a god of drought, but also a god of plenty. In the account of his great feast given on page 209 we see his association with agriculture from the fact that his

consorts impersonated fertility goddesses, and his youth is shown by the fact that on the return of the gods, he was the first to arrive (p. 188). His connection with war is shown by his patronage of the college for youths, where the young warriors graduated. According to tradition Tezcatlipoca was the great enemy of Quetzalcoatl, and in the guise of a sorcerer caused his downfall and the dispersal of the Toltecs.

Tezcatlipoca gets his name from the mirror he carried. In this, it was believed, he could see everything that happened in the world. This mirror was made of obsidian, hence its name of smoking mirror, for obsidian, has the appearance of smoked crystal rock. Divination of this nature was usually practised in Central America with a jade sphere. Tezcatlipoca can usually be recognized in the codices since he is generally shown with his mirror. Most frequently it is substituted for one of his feet (Plate XVII, *a*), but sometimes it is worn on the breast or on the head. The great statue of the god in Mexico City was made of obsidian bedecked with gold and jade. In one hand the god held his obsidian mirror in a frame of green, yellow, and blue feathers. Sometimes the god was represented with a skull to symbolize his power of life and death, or decked in contrasted red and black guises.

Quetzalcoatl, the third great god of the inhabitants of the Mexican Plateau, and a deity worshipped all over middle America, is almost as difficult to interpret as his two great rivals Tezcatlipoca and Huitzilopochtli. The

name means "Quetzal snake." The feathers of the quetzal bird, which inhabits a limited mountainous area on the Guatemalan-Mexican border, were highly prized all over ancient Mexico for their rarity and great beauty. Only the three or four long tail feathers of this member of the Trogon family were of marked value. The esteem in which they were held is shown by the extension of the word quetzal to describe anything precious. Unfortunately the leading ruler of the Toltecs bore the name of Quetzalcoatl, and after his death was deified. This has added greatly to the confusion, for it is now not certain whether the god took his name from the man, or the man from the god. It is even possible that such an individual never existed, but was created in an attempt to rationalize the deity. Although definite proof is lacking, one might hazard that an unimportant deity bearing the name of Quetzalcoatl existed from the earliest times, but that the great Toltec namesake, on being promoted to divine rank, added lustre to the original Quetzalcoatl and eventually the two became so inextricably confused that the Mexicans themselves had difficulty in distinguishing between them. It is not improbable that Quetzalcoatl was in early times the Toltec tribal deity, although he appears to have been borrowed by the Toltecs from the Huastecs.

The great centre of his cult was the city of Cholula, where, according to tradition, the remnants of the Toltecs settled after the overthrow of their dominion. The

pyramid, on which his temple stood, was the greatest in the New World, and in mass exceeded the pyramid of Cheops on the banks of the Nile. The remains of this great structure, now crowned by a Christian church, are still to be seen on the outskirts of the modern town of Cholula. Hither in ancient times came pilgrims from all parts of Mexico. As tribal god of the Toltecs, Quetzalcoatl came to be considered the great civilizer of ancient Mexico, and was credited with the introduction of metal working, the calendar, jade and other exotic products such as the quetzal feathers.

Primarily Quetzalcoatl was the wind god, and as its patron was known as Eecatl, which is the Aztec name for wind. As the wind god he was depicted with a peculiar beak-like mouth and square stumpy nose as in the hieroglyph for the day Eecatl. (Plate XXI.) In addition he wore a conical painted hat, hooked earrings, the loops of which turned outwards, and a section of a conch shell as a breast ornament. (Plate XVII, *d.*) Sometimes he wears a scraggy beard below the beak. In his guise of wind god he is very readily recognizable. Whereas the temples of all other gods were square or oblong, those dedicated to the wind god's worship were circular. Presumably they were built in this shape in order to offer the least possible resistance to the wind!

Since the winds bring the clouds, Quetzalcoatl is to a certain extent an agricultural and fertility god, and for this reason barren women prayed to him for offspring. According to some accounts Quetzalcoatl was one of the

original creator gods, and was himself miraculously conceived through his mother coming in contact with a jade stone. His mother was said to have been Chalchihuitlicue, the water-goddess wife of the chief Tlaloc. This story was clearly made to rationalize the knitting together of wind and rain.

Quetzalcoatl was also worshipped as lord of the planet Venus under the calendar name "1 Acatl," one of the days on which the Venus cycle was supposed to start. According to the tradition Quetzalcoatl was converted into the planet Venus at his death, and eight days after, the period of obscuration of the planet at inferior conjunction according to Mexican calculations, he rose again from the dead, reappearing as Venus as morning star. Every 104 years the planet Venus was supposed to return on this date, although in actual fact the Venus cycle gained about 4 days in this period. It was believed that Quetzalcoatl would return in a year 1 Acatl, and this belief was of material aid to Cortez and his followers, since they arrived in a year 1 Acatl. It was believed that Quetzalcoatl would return in a year white, and would reappear from the east. Furthermore, Quetzalcoatl wore crosses on his clothing. It is no wonder, then, that the Mexicans at first believed that their beloved god had returned with his followers when the Spaniards set foot on the mainland. They were speedily disillusioned.

The drawing of blood from different parts of the body was said to have been a custom introduced by

Quetzalcoatl, who was opposed to human sacrifice. His worship as the feathered serpent was very widespread all over Mexico and the Maya country. A serpent with feathers attached to its scales is the commonest art motif in aboriginal middle America, and this doubtlessly represents the god. (Plate III.) Frequently a human face is shown in the snake's open jaws. These representations range from the purely naturalistic to the extremes of conventionalization. The fact that the quetzal bird is not indigenous to the Mexican plateau shows that the quetzal-bird-snake concept must have been introduced from the south. Representations of feathered serpents occur in Old Empire Maya art, and it is more than probable that the cult penetrated into Mexico at an early period, acquiring great importance at a later period.

Tonacatecutli and *Tonacaciuatl* were the male and female creator gods. They were believed to have been responsible for the creation of the world and of the gods. Little attention was paid them since it was believed that they were so far removed from human affairs that they would scarcely intervene in mundane matters. / /

Creation Legends

The early Spanish chroniclers give several accounts of the creation, which, unfortunately, are at variance with one another. It is more than probable that there

were a number of distinct local legends which account for the conflicting stories. Space forbids a full summary of all these versions, but below is given an outline of these beliefs compiled from various sources.

The world was first created by Tonacatecutli and Tonacaciuatl, who placed a great dragon-like monster in the primal waters. The back of this monster, which was called Cipactli, the name of the first day sign, formed the earth. After a number of the more important gods had been created, Tonacaciuatl gave birth to a flint knife, which was immediately thrown to earth. As soon as it touched earth sixteen hundred gods sprang forth. After deliberation these decided that they would like to create man. They asked permission of their mother, Tonacaciuatl, who told them to apply to Mictlantecutli, the lord of the underworld. Quetzalcoatl, or according to one version Xolotl, the dog-headed god, was sent. He managed to get bones from Mictlantecutli, but on hurrying back, he dropped them. Thereupon Ciuacoatl, an earth goddess, crushed the bones, making the first pair of humans from the powder. In the other version, Xolotl obtained a very large bone, which was placed in a vessel. All the gods drew blood from their bodies, and this was poured on the bone. On the fourth day a young man emerged from the vessel, and at the end of a further four days, a young woman also emerged. The world was peopled by their descendants.

At this time the world was still in darkness, for the sun had not yet been created. The gods assembled at



a



b

PLATE XX. OFFERINGS

a, Priests dressed as the God Tezcatlipoca piercing ears to draw blood for sacrifice. *b*, Tonatiuh, the sun god, or a priest in his garb holding a brazier of copal incense in front of a temple in which a turkey stands.

Teotihuacan to discuss its creation. In order to become the sun, it was necessary that a god first throw himself into a fire. Nanahuatzin, the syphilitic god, volunteered for the sacrifice, since he had little desire to live owing to the dread disease from which he suffered. Prior to his immolation, Nanahuatzin spent four days in penance and sacrifice, drawing blood from his own body as an offering. At midnight of the chosen day he cast himself into the fire in the presence of all the gods, and after an interval appeared as the rising sun in the east. He was very red, and none of the gods could look at him. The moon rose at the same time, its brightness being equal to that of the sun, but one of the gods threw a rabbit in its face, and that dimmed its light. The sun remained stationary in the sky, and the gods on earth were so burned by the heat of its rays that they decided to commit suicide. Quetzalcoatl, as the wind god, slew the gods one by one. When all were dead Quetzalcoatl exerted all his strength, and moved the sun by the force of the winds he controlled. Since then the sun has always moved across the sky.

After the world had existed a little more than four thousand years it was destroyed by a great flood, and most men were turned into fish. This first period was called "Water sun." A little more than 4000 years later the world was again destroyed. This time the destruction was due to violent winds, and, with few exceptions, all men were turned into monkeys. This period, which was called "Wind sun," was succeeded by another

of slightly longer duration, which was known as "Fire sun," since it ended by the almost complete destruction of the world by fire. Some 5000 years later mankind was again almost destroyed by famine. The present age, in which we are living, would be destroyed by earthquakes, it was believed.

The famous calendar stone, now in the National Museum in Mexico City, refers to these five periods of the earth's history. In the centre is the sign 4 Olin, or in English "4 Earthquakes," the day on which, it was believed, the world would eventually be destroyed by earthquakes. Each corner of the Olin sign is occupied by one of the days that marked a previous end of the world. At the bottom left corner is 4 Quiauitl or 4 Rain, the date that ended the world by flood. At the top left corner stands 4 Eecatl or 4 Wind, the day that marked the destruction of the world by wind. The top and bottom corners on the right contain respectively 4 Ocelotl and 4 Atl, the days that marked the other destructions of the world. Around the circumference are placed two snakes, the heads of which meet face to face at the base. In each open mouth is a human face, while on the sides of the snakes' bodies are depicted the twenty day signs.

The Tlaxcalans were many centuries ahead of their contemporaries in their theories of the world's origin. They believed that it had not been deliberately created, but originated merely by chance. Indeed, all Middle American peoples held more modern ideas as to the length of the world's existence than those imposed on

them by their European conquerors. The Aztecs, as we have seen, placed the beginning of the earth some 20,000 years ago, whereas Maya computations carried the count possibly millions of years into the past.

Human Sacrifice

Human sacrifice played such a part in Mexican religion, and is mentioned so frequently in these pages that the following account from a very early source is of peculiar interest, quite apart from the quaint phraseology of its Shakespearean English. The account is from Peter Martyr, who wrote a few years after the conquest of Mexico. The present translation from the Latin was published in 1612. 20

“When any moved through piety towards any divine power, determineth to dedicate an Image thereunto, he endeavoureth to gather together of seedes fit to bee eaten, such an heape, as may suffice for the height of that Image which he hath purposed to erect, bruising those seedes, and grinding them to meale. But oh cruell wickednes, oh horrible barbarousness, they teare in peeces so many boyes, and girles, or so many slaves, before the meale which is to be baked, while they draw so much blood, as in stead of luke warme water may suffice to temper the lumpe, which by the hellish butchers of that art, without any perturbation of the stomacke being sufficiently kneaded, while it is moyst and soft, even as a potter of the clay, or a wax chandler of wax, so doth

this image maker, admitted and chosen to be maister of this damned & cursed worke. I have else where said, if I mistake not, that these sacrifices are not slaine, by cutting of the throat, but by thrusting a knife through the short ribs neer unto the hart, so that their hart is pulled out, to be sacrificed while they be yet living, & behold their own miserable condition: with the blod which is next unto the hart they annoint their godds lips, but burne the heart it selfe, who thereby suppose the displeasure of their godds to be appeased, and this prodigious act, the priests perswade the people to be acceptable to their Idols. But many wil demand, & that rightly, what they do with the flesh & members of those miserable sacrifices: O wicked yawning & gaping, oh loathsom provocation to vomit: as the Jewes sometimes eate the lambs which were sacrificed by the old law, so do they eate mans flesh, casting only away the hands, feet, & bowels. . . . In the halles, which as we sayd before, were in the temples, were the great Images of thir godds, & in the halles were darke inner roomes, into the which they enter by narrow & strait dores, whereunto the priests only have accesse. . . . Some of Cortes his familiars, entred into those narrow, & darke chappels, against the keepers wils, and when by torchlight they saw the wals besmeared with a redd colour, they made prooffe with the pointes of their poniardes, what it should be, and breake the walles. O bruitish minds: the walles were not only besprinckled with the blood of humane sacrifices, but they found blood added upon blood two

fingers thicke, oh loathing to the stomacke, out of the holes they made with their poniardes they say, an intolerable hellish stincke issued from the blood which lay hidd under the fresh." 2 /

It cannot be too often reiterated that human sacrifice was man's side of the bargain with the gods. Man gave life to have life: he offered blood in return for rain. Few religions endow their deities with the belief that it is better to give than to receive, and the Mexicans lived too close to nature to suppose that its personifications were less harsh.

We have passed in hasty review the principal characters of the Aztec pantheon. Most of them we have traced back to the soil, whose cultivators first conceived them, but the functions and development of a few baffle us. Nevertheless, we can be sure that far in the past the rude rustic molded them from the plants, the elements, and the soil, that together filled his life. "Scratch a Russian and find a Tartar" runs the old saw. Strip a Mexican god and you will find nature. This love of the soil survives undiminished in modern Mexico, for only the land hunger of the peons brought Mexico's Maderos and Zapatas to the fore, and made possible the overthrow of Porfirio Diaz. 22

CHAPTER VI

THE CALENDAR AND THE FEASTS

Methods of Reckoning Time. The Day Signs. The Weeks with Their Varying Fortune. The Solar Year. The Religious Festivals Month by Month. The Five Unlucky Days. The Concurrent Double Count. The Reckoning of Years. The Writing of Dates. New Fire Ceremony Held Every Fifty-two Years. The Sacred and Divinatory Nature of the *Tonalamatl*. World Directions and Colors. The Planet Venus. Zapotecan Count. Origin of the Mexican Calendar. Slaying of the Representative of the God Tezcatlipoca. The Human Sacrifice to the Sun.

THE Mexican calendar, which was far simpler than that of the Maya, played a very important part in the daily life of the Mexicans. It consisted of two concurrent counts. The first of these was a sacred almanac called the *Tonalamatl*, which consisted of only 260 days, and functioned primarily for ceremonial and divinatory computations. The second count was an approximation to the solar year, for it was a 365-day year, consisting of 18 months of 20 days each and a final group of 5 odd days, the last being a period of very bad omen, during which the minimum amount of work was undertaken. No correction was made to the calendar for leap years, but it is probable that the advance made by the calendar over the tropical year through the lack of intercalation was computed, and the required correction noted. This, at least, we know was the Maya practice.

MEXICO BEFORE CORTEZ

With these two systems running concurrently a day in the *Tonalamatl* could not coincide again with a day in the 365-day year for 52 years (18,980 days). This is so because the highest common factor of the two numbers is only five, hence the interval that must elapse between such coincidences was $365 \times 260 \div 5 = 18,980$.

The sacred almanac or *Tonalamatl* was formed by twenty day signs running concurrently with the numbers one to thirteen. These two sequences repeated themselves in unchanging order. Since there is no common factor of thirteen and twenty, the same day sign and number could not coincide for 260 days. In this way no day, complete with name and number, could repeat in a single *Tonalamatl*. Below are given the first thirty days of the almanac. During this period, it will be noted, the thirteen numbers have repeated, and are started on

1 Cipactli (Mythical water-monster)	3 Cozcaquauhtli (Vulture)
2 Eecatl (Wind)	4 Olin (Movement)
3 Calli (House)	5 Tecpatl (Stone knife)
4 Quetzpalin (Iguana Lizard)	6 Quiauitl (Rain)
5 Coatl (Snake)	7 Xochitl (Flower)
6 Miquiztli (Death)	8 Cipactli
7 Mazatl (Deer)	9 Eecatl
8 Tochtli (Rabbit)	10 Calli
9 Atl (Water)	11 Quetzpalin
10 Itzcuintli (Dog)	12 Coatl
11 Ozomatli (Howling monkey)	13 Miquiztli
12 Malinalli (Grass)	1 Mazatl
13 Acatl (Reed)	2 Tochtli
1 Ocelotl (Ocelot)	3 Atl
2 Quauhtli (Eagle)	4 Itzcuintli, etc.



PLATE XXI. HIEROGLYPHS FOR THE TWENTY DAYS

1, Cipactli; 2, Eecatl; 3, Calli; 4, Quetzpalin; 5, Coatl; 6, Miquiztli; 7, Mazatl; 8, Tochtl; 9, Atl; 10, Itzcuintli; 11, Ozomatli; 12, Malinalli; 13, Acatl; 14, Ocelotl; 15, Quauhtli; 16, Cozcaquauhtli; 17, Olin; 18, Tecpatl; 19, Quiauitl; 20, Xochitl.

their third round, while ten of the day names have repeated, but naturally with different numbers. In parentheses are given the English translations of the Aztec names. The actual glyphs for these days are given on Plate XXI, the numbers were written with dots, one dot for each number. (Plate XXIII.)

At its next recurrence Cipactli will have the numeral 2 attached to it, for in the twenty-day interval from its last appearance the numeral 8 will have reached 13 twice, and advanced to the second position ($8 + 20 = 28 \div 13$; remainder of 2). At its next occurrence still twenty days later, the attached number will be 9, until 260 days from the start the attached number will be 1 again.

The *Tonalamatl* was divided into periods of thirteen days, which, for convenience, we can term weeks. Each period or week started with a day, the attached number of which was one. After thirteen days, of course, the number one repeats, but the day name is thirteen positions later in the *Tonalamatl*. Each period was ruled over by a patron god, and on the auspiciousness or ill auspiciousness of this first day depended the fortune of the whole week, but a lucky day in an unlucky period was considered to be of good omen. These weeks were much used by the sorcerers and astrologers in prophesying the careers of newly born babies, and in arranging suitable occasions for all undertakings. The starting days of the periods were in their correct order as follows:

1 *Cipactli*. The week ushered in by this sign was of

good omen, and those born in it would be happy and fortunate.

1 *Ocelotl*. The week starting with this day was unlucky. Men born during this period would be immoral. They would be taken prisoners of war, and finish their lives on the sacrificial block, or through want would be forced to sell themselves into slavery. Women born under this sign would be taken in adultery, and would be put to death as a consequence.

1 *Mazatl*. The period was lucky.

1 *Xochitl*. Men born during this week were gay, witty and fond of music. Ladies, whose birthday fell in this week, were inclined to be a little too liberal with their favors.

1 *Acatl*. Liars, bearers of false witness and scandal-mongers were born in the 1 *Acatl* week. The period, which was under the patronage of Quetzalcoatl, was considered to be unlucky.

1 *Miquiztli*. Neither particularly lucky nor unlucky. Tezcatlipoca was the patron god.

1 *Quiauitl*. A disastrous period. On the first day the *Cuateteo*, who were the malevolent spirits of women who had died in childbirth, descended on the world, bringing all sorts of sickness to children. Parents guarded against this by making their children stay indoors on this day. The next eight days of the week were of similar bad omen, but the last four days were more auspicious.

1 *Malinalli*. An unlucky sign. Those born under it would be happy for some time, but sooner or later bad

luck would overtake them. Many would die in adolescence.

1 *Coatl*. A lucky week especially for merchants and travellers.

1 *Tecpatl*. Huitzilopochtli was the patron god, and the period opened with a great feast in his honor.

1 *Ozomatli*. A fairly lucky period. The Ciuateteo were believed to return to earth, sowing sickness and death. Those who were very ill at this time were left to die, as it was believed that they would not live.

1 *Quetzpalin*. An auspicious period. Boys born in this week would be brave. They would receive no hurt from falls, since the lizard, under whose sign (*Quetzpalin*) they were born, can similarly fall from great heights and land unhurt on its feet.

1 *Olin*. Neither lucky nor unlucky. If parents took good care of the education of their children, they would turn out well, but the reverse if neglected in their youth.

1 *Itzcuintli*. A very lucky period. It was under the patronage of Xiuhtecutli, the fire god. Special feasts were held in his honor, and food offerings were thrown in the fire. Specially manufactured pieces of paper decorated with jade and rich feathers covered his image.

1 *Calli*. A very unlucky week. The Ciuateteo were active again, spreading disease, and those born under this sign must expect to die "with their boots on."

1 *Cozcaquauhtli*. A long and happy life was in store for those born on this day.

1 *Atl*. The period, which was of very bad omen,

was ruled over by the water goddess Chalchihuitlicue. On the first day those who travelled much by water made their offerings to her.

1 *Eecatl*. Quetzalcoatl was the patron, and the period was considered to be unlucky. Those born during its course would turn out to be traitors, sorcerers and witches. They would have the power to turn themselves into animals.

1 *Quauhtli*. The Ciuateteo were active again, and the week was generally unlucky. Men born under this sign would be brave but haughty and overbearing, and much given to flattery. Women born under this same sign would not be all that they should be.

1 *Tochtli*. The last period. The patron god was Izquitecatl, the Mexican equivalent of Bacchus. Those born under this sign consequently were drunkards. Nevertheless the period was lucky, and those born in it would be prosperous and happy with the sole drawback just noted. The next week began the round again with 1 *Cipactli*.

The division of the *Tonalamatl* into these twenty weeks was made purely for divinatory purposes, and possessed no civil connotation.

The solar year, as already pointed out, consisted of eighteen months of twenty days each with five supernumerary days added at the close. Each month had its special feast, and a brief list and description of these gives a certain insight into Mexican religious observances. The days of Maya months were numbered from

0 to 19, but Mexican months bore the numbers 1 to 20. The months with their principal feasts were as follows:

Atlacoualco, the first month, was dedicated to the Tlaloc rain gods and Chalchihuitlicue, a water goddess and the wife of the chief Tlaloc. The name means "The buying of the rains," for during its course special ceremonies were held to insure a plentiful rainfall at the close of the dry season. Large numbers of children were sacrificed on the mountain tops, where the Tlalocs were believed to live. The doomed children were carried thither in litters bedecked with flowers and feathers. Were the children to weep much *en route*, heavy rains might be expected, the tears insuring this—a good example of sympathetic magic, in which like begets like. War captives were also sacrificed to Xipe, the god of flaying and secondarily of agriculture. Each captive was attached to a stone altar by a rope round his ankle, and given a blunt wooden sword. He was then forced to fight warriors armed with the usual weapons. (Plate XXII.) After the mock combat, the prisoner was carried to a stone altar, on which he was laid. The priest then cut out his heart with an obsidian knife, and raised it in offering to the sun and the four world directions. The body of the victim was rolled down the pyramid steps to the crowd below. There it was cut up and eaten as a kind of communion with the gods. At the time of the conquest this month started on February 12 (Gregorian).

Tlacaxipeualiztli, the second month, was dedicated to

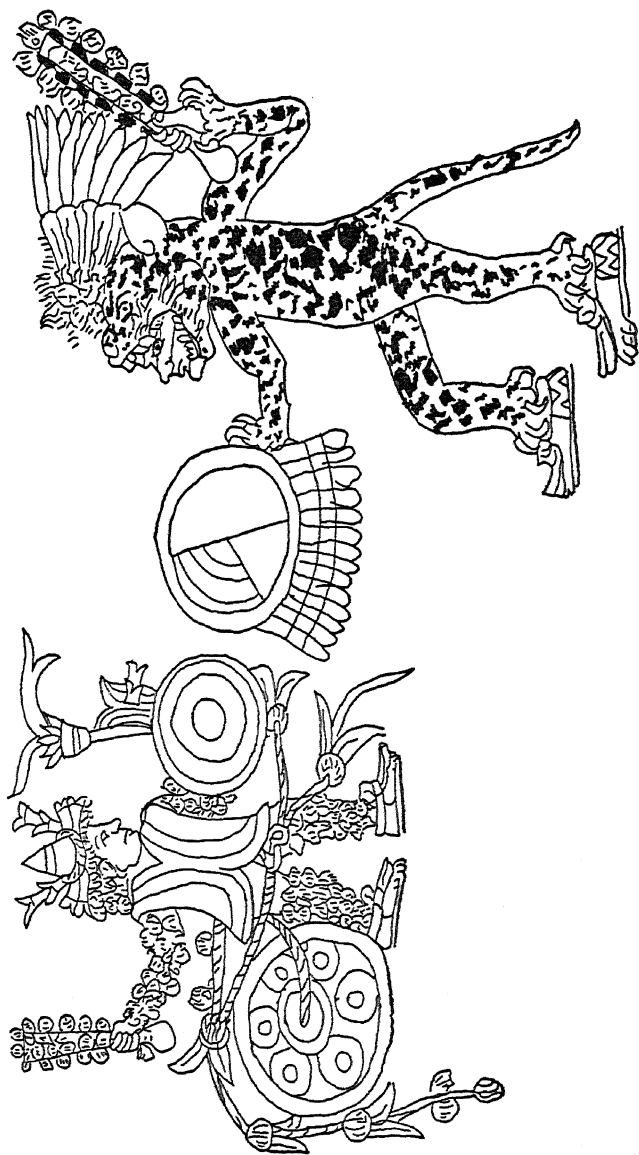


PLATE XXII. GLADIATORIAL COMBAT

The sacrificial victim tied to a stone, and armed only with a paper sword defends himself against the warrior, clad in a jaguar skin, who has a real sword. Magliabecchi Codex.

Xipe, the god of flaying. A great feast in his honor was held on the last day of the month. Warriors dragged their prisoners by their hair up the steps of the principal pyramid, where they were sacrificed. After their hearts had been removed, the bodies were rolled down the steps to priests below, who removed the skins. Old men then cut up the bodies in the presence of their captors, and the flesh was eaten with corn in solemn communion.

Next day more captives were sacrificed to Xipe, but this time the same ceremony of gladiatorial combats described for the previous month was held. The captives were dragged up the steps by their hair, attached one by one to the stones, and then with wooden sword made to fight four warriors one after the other. These warriors were dressed in jaguar skins or eagle plumes. Many of the captives were so exhausted after their rough handling in mounting the steps, that they were unable to resist, but others wore out their adversaries. In that case a fifth warrior, who was left-handed, came forward, and raising the exhausted man in his arms, dashed him to the ground. He was then dragged to the sacrificial stone. Prior to the combat the victim had been given a cup of pulque, which, after offering to the world directions, he drank through a reed—Dutch courage for the combat.

The hearts of the victims were thrown into wooden tubs, and from the lacerated hollows, that had held the victims' hearts, priests drew off blood in tubes, which was offered to the sun god. The captor of a victim filled

another bowl with his blood, and went to the different statues of the gods, smearing their lips with the blood. Subsequently he took the body to his house, where it served as a ritualistic feast for his friends, although he himself did not eat the flesh. The body had previously been flayed, and men donning the skins danced in the streets. Finally a great dance was held, in which the captors danced carrying in their hands the heads of their victims.

It is said that men of the cities, with which the Aztecs were at war, frequently attended this ceremony, but they were not molested, for it was considered that they would be duly awed at seeing the fate that awaited so many prisoners of war.

Next day another great dance was held, apparently of an agricultural significance, since the participants wore collars and garlands of tamales and corn cakes, and carried feathers and stalks of young maize.

Twenty days after the flaying ceremony those who wore the skins of the victims removed them, and the wearers were bathed in maize flour and water in a kind of absolution ceremony, the captors doing penance for having slain their victims. The captor meanwhile had erected a kind of tripod in his courtyard surmounted by a mat, on which rested the paper ornaments of his victim. He lent these to a friend of his, a courageous young man, who went through the town as if looking for wicked people. If he caught any one he seized the man's possessions, and took them back to his friend, the cap-

tor. The captor also celebrated his victory and the sacrifice of his victim by erecting a column as a sign that he had taken prisoners, and placing on top of it the thigh bone of his captive ornamented with sacrificial papers.

Xipe was the patron of the goldsmiths' guild, and it, too, celebrated his month by sacrificing victims. The connection between the god of flaying and the goldsmiths seems to lie in the fact that the skins of the victims worn at his festival were depicted as yellow, and thus might be said to resemble the gold-plated products of their trade.

Tozoztontli, the third month, was dedicated to the Tlalocs and Coatlicue, a rain goddess and patroness of agriculture. Spring was now well advanced, and a special feast of flowers was held. Until this event no one was allowed to smell any flowers. More children were sacrificed to the Tlalocs that rains might fall in time for the maize crop. Some of the ceremonies already described in connection with the Xipe sacrifices did not terminate until this month. The name of the month means vigil or fast.

Huei Tozoztli, the fourth month, was dedicated to Centeotl, the maize god, and Chicomecoatl, a goddess of maize. The faithful drew blood from their ears, with which they smeared reeds. With these and branches of a certain sacred tree they decorated their houses and their household gods. Young maize plants were brought from the fields to deck the altars of the men's houses, and offerings of food were made.

In the temple of Chicomecoatl special ceremonies were held. Hither came a procession of young girls bearing on the backs by means of tump lines loads of ears of corn from the previous harvest. These were presented to the goddess and then taken back to the houses, having been, so to speak, blessed. These ears of corn were kept for sowing the next crop, and some were placed in the middle of the grain stored in the granary to protect it from mildew and damage.

Toxcatl, the fifth month, was dedicated to Tezcatlipoca. At this time took place the sacrifice of the youth, who had been impersonating this god during the past year. This event is described in full detail on page 206. In addition to the Tezcatlipoca festival, an important feast was held in honor of Huitzilopochtli. An image of this god was made of Tzoalli flour, the bones being made of the sacred mizquitl wood. The image, richly garbed, was placed on a large litter carved with snakes' bodies, and carried with singing and dancing to another temple. In front an enormous sheet of thick paper was carried by youths. Next morning copal and food were offered to the household images of the god. Subsequently offerings, which included the sacrifice of partridges, were made, and special dances were performed by young girls. The ceremonies closed with the sacrifice of a youth, who for a year past had impersonated Huitzilopochtli in a manner somewhat similar to the impersonation of Tezcatlipoca described on page 206.

This sacrifice varied from the usual practice in that

the victim was not sacrificed on a convex stone, but was held in the arms of the priests while his heart was removed, and secondly the victim chose his own time for being sacrificed. Prior to this he took part in the dances held in his honor, leaving this of his own free will for death. Some, it is said, were in haste to die, others delayed their end, but none, it would appear, required persuasion, for it was believed that since the victim impersonated the great god Huitzilopochtli, he took divine rank, and might expect great honor and glory in the next world. The victim's head was removed immediately after his death and placed on a pole alongside of that of the impersonator of Tezcatlipoca. Many other prisoners were sacrificed, and the ceremonies concluded with a general dance and incense-burning ceremony. A feature of the ceremonies was that all the children were given small cuts on the chest, stomach, and the arms with stone or obsidian knives.

Etzalqualiztli, the sixth month, took its name from certain special dishes resembling our modern succotash, which were eaten at this time. During this month more ceremonies were made to insure that the Tlalocs would send rain for the young crops. The priests and leaders of Mexico City made a pilgrimage to a lake near Citaltepec, north of the city to seek special reeds used to adorn the altars of the Tlalocs. On this journey a precedent was set for the modern hold-up man, for it was permissible to rob any one met in the road, taking from him even his clothes. The victim was not permitted to

resist, and even those bearing tribute to the Aztec ruler received the same treatment. Any one who was rash enough to resist was slain or, at the least, very badly hurt. Needless to say every one took good care to keep out of the way of these holy "Gentlemen of the Road."

One of the most pathetic ceremonies of propitiation of the Tlalocs centred round the death of a young boy and girl. They were placed in a canoe together with the hearts of many other sacrificed victims, and towed to the centre of this same lake, where the canoe was sunk, and the children allowed to drown. At this same ceremony such priests of the Tlalocs as had done some wrong in the past year were punished by being half drowned in this same lake.

Tecuhilhuitontli, the seventh month, was noted for the feasts held in honor of Huixtocihuatl, the goddess of salt. This festival was of importance in Mexico City because of the large number of persons who earned a living by extracting salt from Lake Texcoco. The most important ceremony was a dance in which only women took part. They danced wreathed in flowers and linked together with floral ropes. In their centre danced a woman who represented the salt goddess. At the end of the ceremony she was doomed to sacrifice. Ceremonies were also held to propitiate the Tlalocs, for it was believed that Huixtocihuatl was their sister, a natural assumption in that salt was not mined to any extent in ancient Mexico, but was extracted from salt water.

Hueitecuhilhuitl, the eighth month, means in Nahua

"The great feast of the rulers." It was under the patronage of Xilonen, the goddess of the tender ears of corn, which at this time (July) were beginning to ripen. The feast in her honor lasted eight days, and during this time the women wore their hair loose. This, an example of sympathetic magic, in which like produces like, was to insure that the maize would grow large and develop a good beard. Any one who visited the temple of Xilonen during this period was given as much corn as he could eat and a special kind of pinol. A slave girl impersonated the maize goddess, dancing continuously during these eight days. It was believed that if she danced vigorously the new crop of corn would be abundant and healthy, but should she dance listlessly, a good crop could not be expected. After dancing all night the girl was sacrificed at daybreak. A priest lifted her on his back, while another cut off her head, and subsequently removed her heart. As soon as the sacrifice was completed the people were free to eat new corn, which up to then had been forbidden to them. Decapitation, symbolizing the gathering of the corn, was the usual practice in agricultural sacrifices.

Tlaxuchimaco, the ninth month, was dedicated to Huitzilopochtli, the Aztec war god. Large numbers of turkeys were killed, and tamales prepared for a great feast to be held on the following day. The images of Huitzilopochtli and other gods were wreathed with flowers, and a great dance was held. This varied from the usual run of dances, in which men and women danced

apart or only one sex took part, for in this dance the men placed their arms around the women's necks. In this same month the merchants honored their patron god Yacatecuhtli with sacrifices.

Xocotlhuetzi, the tenth month, was dedicated to the fire god, who was called Xiuh tecutli or Huehuetecotl, "The old old god." A revolting ceremony was held in connection with this festival. Prisoners of war were first made to take part in a ceremony, in which they danced side by side with their captors. Next day the prisoners were taken by their captors to the top of the pyramid. There the captors cast a certain powder in their faces. This was made from Yauhtli (*Tagetes lucida*), and had the effect of an anæsthetic, deadening their sensibilities for the terrible ordeal that was to come. Then lifting the captives, who were bound hand and foot, they danced round a great furnace, each man with his captive on his back. Then one by one as they circled round the furnace, each captor threw his captive into the great fire. Just before death put an end to the wretched man's sufferings, he was quickly dragged out with the aid of large hooks by the priests, who promptly removed the heart from its half-burned body.

A feature of the ceremonies in connection with the fire god centred round a great pole 150 feet high. This had on its summit an image, that probably represented the fire god, made of dough of Tzoalli (amaranth flour). This was dressed in a huipil and decorated with paper ornaments. At the conclusion of the ceremonies

a wild scramble took place among the young men to see who could first climb up the smooth pole. The lucky winner scattered the dough to the crowd below, and seized the spears, spear-thrower and shield that the figure wore. As a reward he was presented with certain ornaments and a mantle of a type that no one else was allowed to wear. Furthermore he was carried by the priests to his home to the accompaniment of music.

Ochpaniztli, the eleventh month, was marked by feasts in honor of Teteoinan, mother of the gods, who was also known as Tocitzin, and was secondarily a goddess of the ripe maize. A woman, who impersonated the goddess, was sacrificed at the close of the ceremonies. It was considered very important that she should not weep, probably for fear that that would cause heavy rains at the coming harvest. With this end in view special games and buffoonery were indulged in in her presence. The woman had no knowledge that she was to be sacrificed. Indeed, when she was being prepared for the sacrifice, she was informed that she was being dressed in this manner so that she might become the mistress of one of the rulers that night. This was not far from the truth, since she was to sleep with death so soon.

When the fatal moment arrived, she was placed on the back of another woman, and her head cut off. The body was immediately skinned, and a robust youth donned the skin. Wearing this he was carried by the nobles and priests to the temple of Huitzilopochtli, where he sacrificed other prisoners. Afterwards, mimick-

ing the goddess he impersonated, he went through fertility rites with Huitzilopochtli. Meanwhile a section of the skin removed from the slain woman's thigh was carried to the temple of Centeotl, the god of maize and son of Teteoinan. Prior to this it had been worn by a youth impersonating this god.

A great military review took place after these ceremonies. The Aztec ruler, seated on a throne covered with an ocelot skin and with his feet on a hassock of eagle feathers, distributed mantles and other insignia of rank to those who had deserved promotion for their valor. The ocelot and eagle were the emblems of the two orders of warriors, hence their employment in this ceremony.

An interesting ceremony in connection with these festivals of the earth goddess in her dual aspect of keeper of the crops and patroness of warriors was held at the close of the festivals. Certain priests, dressed in the flayed skins of sacrificial victims, scattered maize of all colors, white, red, yellow and brown, as well as calabash seeds on the crowd waiting below. This seed was considered sacred, and a wild scramble ensued to gather it. Doubtless such seed was reserved for sowing in the following crop.

Teotleco, which means "The return of the gods," was the name of the twelfth month. The Aztecs believed that during part of the year the gods were absent, but returned on the eighteenth day of this month, corresponding to October 10. On the eve of this return a

mat was laid at the entrance of the principal temple, and on this fine maize flour was spread. The chief priest kept watch during the night for signs of the gods' return, which was usually manifested after midnight by a foot-print appearing in the flour. As soon as this appeared the waiting priest shouted the glad tidings, and the people who had been awaiting the signal, rushed to the temple, where they danced and rejoiced till day-break.

It was believed that the first god to arrive was Tezcatlipoca, since he was eternally youthful and robust. During the day all the other gods, who had travelled more slowly, arrived save two. These were Xiuhtecuhtli, the fire god, and Yacatecuhtli, the god of merchants. The former was delayed because of his great age, for he was always called the old, old god; the second also arrived late since, as a merchant, he would be expected to wander off the beaten track in search of business.

A great orgy of drinking and the burning of captives in a furnace closed this festival. According to one early authority the arrival of Tezcatlipoca was played by a youth, who, like all other god impersonators, met his death by sacrifice at the close of the feast.

Tepeilhuitl, the thirteenth month, was dedicated to the gods of the mountains, who were merely an aspect of the Tlalocs. Wooden snakes were made in honor of the Tlalocs, for the snake was their emblem, and many little figurines, which were covered with amaranth paste. Some of these little figures were made in honor of the

Tlalocs, others in memory of those who died under certain circumstances that qualified them for the after-world ruled over by the Tlalocs (see page 49). Four women and a man impersonated certain of these gods, and, arrayed in costly fabrics bespattered with crude rubber, were carried in procession to one of the temples, where they were sacrificed. After the heads had been cut off and stuck on poles, the bodies were cooked and eaten by the principal members of the community in a kind of communion.

Quecholli, the fourteenth month, was presided over by Mixcoatl, a god of hunting and, by extension, of war. Arrows and spears for use in war were made at this time. During the four days that this occupation lasted a general penance ceremony was held. Blood was drawn from different parts of the body and offered in sacrifice. The old people, who alone were permitted to carouse, abstained from liquor during this period, and husbands did not cohabit with their wives. Small darts and tamales were placed on the graves of the deceased.

On the tenth day the men of Mexico City with the Tlatelucans took part in a great hunting expedition held on the slopes of Cacetepec mountain, which was considered to be a goddess and was known as "Our mother." On the top of this an altar had previously been erected. The hunters formed a ring round the mountain, and started to drive the game toward the summit, shouting, beating drums and firing the grass as they advanced. The ring of hunters gradually converged on the sum-

mit, where large quantities of game had been pent up in this manner. Eventually these were shot by the hunters. Some were sacrificed to Mixcoatli on the altar, and the rest was taken back to the cities. A great banquet ensued, followed by dances and acting in honor of the patron of the feast.

Panquetzaliztli, the fifteenth month, was signalized by a great festival in honor of Huitzilopochtli, the war god. Every day for twenty days a dance was held each night from sunset to about 9 P.M. On the last day captives were sacrificed, and a mock battle was held between two groups of prisoners destined for sacrifice. One group, recruited from captive warriors, was armed with mock weapons; the other group, drawn from the slaves to be sacrificed, was armed with the regular wooden swords set with blades of obsidian. The fighting that ensued was sufficiently serious as to lead to the death of some of the combatants, but whether they died in the combat or not, they were not allowed to live, for the survivors were sacrificed.

In connection with these ceremonies occurred an incident of unusual archæological interest. Certain of the captives, prior to their death, were taken to the houses of their masters. Each one on arriving at his destination dipped his hands in a bowl of red, black or blue paint, and pressed them on the jambs and pillars of the house. He did the same thing at the home of his family. Hand prints of this type, impressed in red paint, are found on buildings in many parts of the world, and

are common on Maya temples. Doubtless there is more than one explanation of their presence, but it is interesting to find this evidence, supplied from an early Spanish source, of one of their causes.

Atemoztli, the sixteenth month, was given up to more festivals in honor of the Tlalocs, the rain and thunder gods of the mountains. For five days prior to the festival the priests allowed no water to touch their heads, and abstained from cohabitation. Long poles from which hung paper streamers coated with crude rubber were set up outside the houses, and each household fashioned little paste images of the Tlalocs to which food and drink offerings were made. All night vigils were held, the people singing and playing before their *penates* and making fresh offerings. The middle of this month coincided with the winter solstice at the time of conquest. Rain was needed at this time prior to the dry period ushered in about the middle of January.

Tiitl, the seventeenth month, was marked by a feast in honor of Ilamatecuhtli—"The old princess." As in the usual Mexican method, a woman impersonating this goddess was sacrificed. She was permitted, indeed expected, to weep and sigh to a large extent as she danced alone before being sacrificed. This would suggest that the festival was held primarily to obtain rain, just as the children were supposed to weep in the rain-making ceremony held in the first month of the year. On this same day the men made small bags, which they filled with straw, dried grass and other soft materials. Carry-

ing these under their cloaks, they sallied forth, giving any woman they met a swipe with the bag. The children used to beat them so hard that they would weep. It may well be that this was the object of this pillow fighting, the tears helping to bring the needed rain.

Izcalli, the eighteenth and last month of the year, was dedicated to Xiuhtecutli, the fire god. Every four years captives were sacrificed, but on the other years the ceremonies were carried out without this usual accompaniment of Aztec religious ceremonies. A great hunt, that lasted ten days, preceded the festival. All the young men took part. On the eve of the young men's return the sacred fire was put out, and new fire made at midnight by twirling one stick of hard wood in a hole in a board of softer wood. All the game brought by the hunters was cooked next morning with the newly made fire. The meat was served to the priests and nobles, whereas the hunters had to be content with certain tamales.

Every four years, when, as stated above, captives were sacrificed, the young children had their ears and lips pierced for ornaments. In the town of Quauhtitlan, about twelve miles from Mexico City, a peculiar ceremony was held at this time. Two women were sacrificed and flayed. Then two leaders of the community dressed in their complete skins, and carrying in their hands the leg bones of the victims, slowly descended the altar steps, roaring the while like wild animals. While they danced round large numbers of birds were sacrificed.

People came from many miles around for this ceremony, and it is related that the birds sacrificed on one occasion passed the 8000 mark. Subsequently six prisoners were placed at the tops of high poles, and shot at by the multitude below with their bows and arrows until they fell dead to the ground. (Plate XIV.) Then, inevitably, their hearts were removed. That night the bodies were eaten at a banquet.

The five odd days at the end of the year were called *Nemontemi*. They were considered extremely unlucky, and no work save what was absolutely indispensable was performed on them. Quarrels were especially to be avoided during this period. There is some doubt as to the position these days should occupy in the year. They were supposed to come at the end of the year, but most early sources agree that new year's day fell on the first day of the month *Toxcatl*, but the unlucky five days apparently came after the eighteenth month.

The ceremonies described above have been given only in the barest outline. Early writers devoted as much as a chapter to the ceremonies of each month. Such a description as has been given above naturally lacks much of the color and romance attached to this series of great feasts that made up the ritual year of the Mexicans, but at least it serves to indicate the general lines of Mexican religious observance without the endless repetition of human sacrifices that gives a wrong impression of Mexican worship.

These months of the solar year, to return to the in-

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interrupted discussion of the calendar, ran concurrently with the sacred almanac of 260 days, called the Tonalamatl. Since both 365 and 260 have a common factor of 5, only every fifth day of the Tonalamatl could coincide with any given day of the solar calendar. In actual practice the day Calli was one of the five days that could fall on the first day of a Mexican month; the other days of the Tonalamatl that could fill this position were Tochtli, Acatl and Tecpatl, each of which is five days later than the day in front of it. Below is given a short section of the two counts functioning side by side. This count starts from an arbitrary 1 Calli 1 Toxcatl, which was in fact the new year's day of the Aztec year corresponding to 1493.

1 Calli	1 Toxcatl	1 Cozcaquauhtli	14 Toxcatl
2 Quetzpalin	2 Toxcatl	2 Olin	15 Toxcatl
3 Coatl	3 Toxcatl	3 Tecpatl	16 Toxcatl
4 Miquiztli	4 Toxcatl	4 Quiauitl	17 Toxcatl
5 Mazatl	5 Toxcatl	5 Xochitl	18 Toxcatl
6 Tochtli	6 Toxcatl	6 Cipactli	19 Toxcatl
7 Atl	7 Toxcatl	7 Eecatl	20 Toxcatl
8 Itzcuintli	8 Toxcatl	8 Calli	1 Etzalqualiztli
9 Ozomatli	9 Toxcatl	9 Quetzpalin	2 Etzalqualiztli
10 Malinalli	10 Toxcatl	10 Coatl	3 Etzalqualiztli
11 Acatl	11 Toxcatl	11 Miquiztli	4 Etzalqualiztli
12 Ocelotl	12 Toxcatl	12 Mazatl	5 Etzalqualiztli
13 Quauhtli	13 Toxcatl	13 Tochtli	6 Etzalqualiztli
		1 Atl	7 Etzalqualiztli

It will be seen that the day of the Tonalamatl that coincides with 1 Toxcatl, will coincide with the first day of every other month in the current year, since there are

twenty day signs and twenty month signs, but the attached number will increase by seven each month, since there are but thirteen numbers. Were the year of only 360 days the same day sign would recur at the beginning of every year, since 360 is divisible by 20 without remainder. Since there are 365 days in the Aztec year, the day is five positions later in the Tonalamatl, and the numerical coefficient is one greater for 365 divided by 13 leaves a remainder of 1. The positions in the Tonalamatl that can serve as new-year days run in the following order:

1 Calli	5 Calli	9 Calli	13 Calli
2 Tochtli	6 Tochtli	10 Tochtli	1 Tochtli
3 Acatl	7 Acatl	11 Acatl	2 Acatl
4 Tecpatl	8 Tecpatl	12 Tecpatl	3 Tecpatl, etc.

Since there are only four day signs and thirteen attached numbers, the position 1 Calli will recur as a new year on 1 Toxcatl only after all the fifty-two possible permutations have been run off, or in other words once in fifty-two years.

This supplied the Mexicans with a very convenient system for differentiating every year in a fifty-two-year cycle, just as we, if we took no account of leap years, might differentiate any year in a seven-year cycle by calling the years Sunday year, Monday year, Tuesday year . . . Sunday year, since, omitting leap years, each year starts a day later in the week than the year that preceded it. Similarly no double date of Tonalamatl day and number combined with the position in the 365-day

year could recur during this period of fifty-two years. By writing 5 Ocelotl 17 Quecholli, for example, one could be certain that this date would not occur again within fifty-two years, and the day was thus differentiated in a manner impossible in our calendar. It is true 17 Quecholli will recur after 365 days, but then it will be accompanied by the Tonalamatl position 6 Quiauitl, and the next time it is associated with the original Ocelotl sign, this will have changed its numerical coefficient, and will have become 9 Ocelotl.

Although the Aztecs used this system to a certain extent, they made more use of a method of giving the Tonalamatl date of the new year in combination with a sign rather like a capital A, following it by the Tonalamatl position of the date to be given. A date of this type, registering 6 Coatl in a year 12 Tochtl and a second giving 13 Quauhtli in a year 5 Acatl are shown in Plate XXIII. This would be an equally satisfactory system were it not that a day of the Tonalamatl may occur twice in a solar year, since the latter count is 105 days longer than the former. The Mexicans got round this difficulty in the following ingenious way. There existed a series of nine gods, known as "The Lords of the Nights," who ruled over successive nights in a strict unending rotation, so that if a certain Lord ruled during the night of 1 Calli, he would not rule again until 10 Malinalli—nine days later. Since 260 days, the length of the Tonalamatl, is not divisible by 9 without remainder, the same god would not be the Lord of the

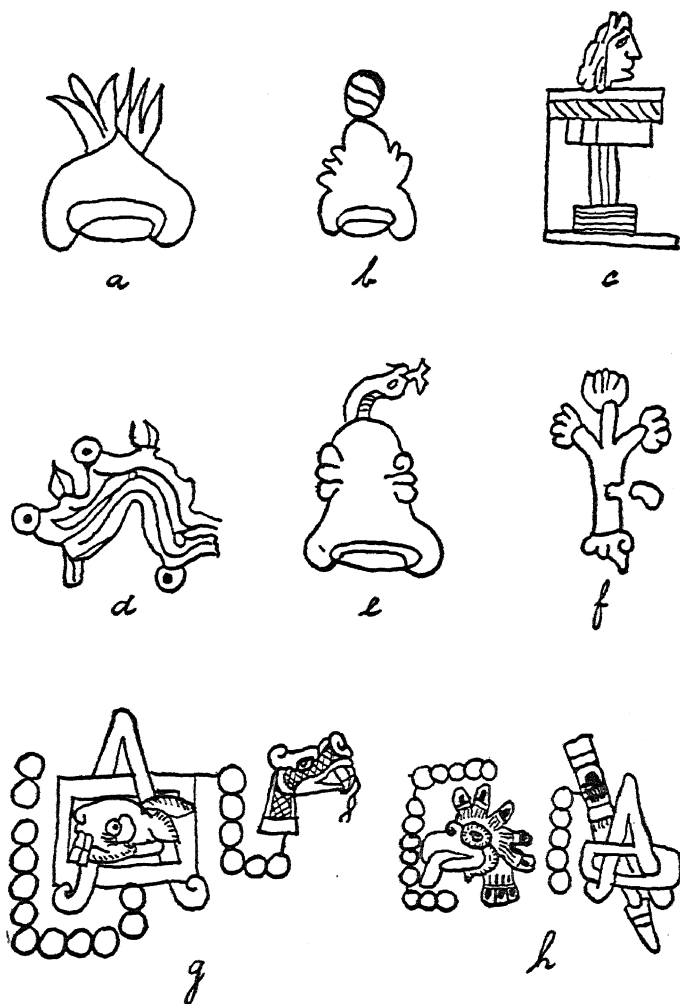


PLATE XXIII. GLYPHS FOR TOWNS AND DATES

a, Acayocan (Place of Reeds); *b*, Tecpayocan (Place of Flints); *c*, Cihuateopan (Temple of Cihuacoatl); *d*, Aculco (Twisted Water); *e*, Coatepec (Snake Hill); *f*, Cuernavaca (Near the Tree); *g*, Day 6 Coatli in a year 12 Tochtli; *h*, Day 13 Quauhtli in a year 5 Acatl.

night on the next occurrence of 1 Calli, but his turn would come the following night—2 Quetzpalin. The Aztecs appear to have differentiated a repetition of the same day in the same year by adding the glyph of the corresponding Lord of the Night.

The end of the fifty-two-year cycle, when a double date would recur for the first time, was the occasion of very important ceremonies. This event took place in the 2 Acatl years. Previously the cycle had ended in the year 1 Tochtli, but owing to a run of bad luck in the 1 Tochtli years, the date of the ceremony was shifted to a year 2 Tochtli. Torquemada has left a detailed account of these ceremonies which is given below in a more abbreviated form.

The natives believed that at the end of this fifty-two-year period the world might come to an end, and would only continue if the gods showed that they were favorably disposed by permitting new fire to be kindled. Consequently their ceremonies were an appeasement of the gods and a token that the people would faithfully serve them if spared such a dreadful fate. All idols, both in the temples and private houses, were replaced. The implements, braziers and furnishings used in the temple services were renewed, and all buildings whitewashed and renovated.

At sunset on the evening before the fatal day, the priests, robing themselves in the vestments of Quetzalcoatl, Tlaloc and other important gods, silently set forth in solemn procession to the summit of a hill called Hui-

xachtecatl, situated about six miles from Tenochtitlan. The priests, who were accompanied by a large part of the populace, so timed themselves that they reached their destination a little before midnight. Meanwhile throughout the length and breadth of the land every fire in home and temple had been extinguished.

Exactly at midnight a captive was sacrificed by the usual method of tearing out the heart. In the cavity, caused by its removal, new fire was made by twirling a stick on a flat board of softer wood. As soon as the first wisp of flame was visible, a great shout arose from the spectators, for this was the sign that the world would not come to an end, but would endure for at least another fifty-two years. From the newly kindled fire a great bonfire was lit so that the people for miles around might know that the gods were favorable, and the world had been spared once more. Among the spectators were many fleet runners. These carried pine torches, which they lit in the flames, then sped forth on the road to their villages. Fresh runners, placed along the route, relayed the torches through the night until the new fire reached the farthest provinces. As soon as the runners reached Mexico City, the fire was lit from their torches on a special altar in the temple of Huitzilopochtli. Hither came all the people to carry the new fire back into their homes. The early chronicler describes the night being as bright as day because of the multitude of torches carried by the crowds.

While waiting to know if the new fire would be lit

and the world continue, every one was filled with great anxiety. Families assembled on the flat roofs of their houses to await the outcome. Pregnant women were shut up in the maize granaries and their faces covered with special masks made of maguey leaves, for it was believed that, should there be difficulty in making new fire, women in this condition would turn into wild animals. Children also were masked, and great care was taken to see that they did not fall asleep while waiting for new fire to be made, as it was believed that they would turn into rats should sleep overtake them.

Until midday following the new fire ceremony, every one fasted, even the drinking of water was prohibited. At noon prisoners were sacrificed, the pregnant women were released from the granaries, and each family sat down to a meal of special cakes made of honey and a certain kind of flour. Copal was burned and birds sacrificed to the gods of the four world directions, and the day concluded with general rejoicings. Such in short was the festival of *Toxiuhmolpilia*, or "The tying up of the years" as the name means. Despite its simplicity, this must have been the most impressive spectacle in ancient Mexico.

It is no exaggeration to say that the Tonalamatl and its operation closely affected the lives and movements of every member of the community from ruler to slave. Examples of its use in connection with birth and marriage are given in Chapter II, but illustrations of such uses might be multiplied a hundredfold. No important

action from birth to death was undertaken without reference to it. No man, for example, would set out on a hunting trip without first discovering whether the day was propitious for such an undertaking. Similarly such tasks as the preparation of the fields, the sowing and harvesting of the crops, the building of houses, and the making of pottery could only be started on lucky days. The departure of merchants for distant lands and declarations of war were likewise governed by the Tonalamatl.

It is difficult for us to realize to what an extent everyday life was governed by such astrological and religious rules and regulations. In addition to the permutations of lucky and unlucky days, the numbers attached to the day signs had benevolent and malevolent values. Thirteen, for instance, was of very good augury; four was man's lucky number because of the four directions of the world, and three was women's auspicious number since three stones formed the hearth, around which a woman's life revolved.

Divisions of the Tonalamatl were also associated with the four world directions and colors. Starting from Cipactli, which was associated with the east, the days were assigned in order to the directions in an anti-clockwise manner, Eecatl pertaining to the north, Calli to the west, Quetzpalin to the south, and Coatl again coinciding with the east. In the same way the years were associated with the four world directions and primary colors, as well as the gods of the world directions. In

addition to the four points of the compass, the centre of the world was considered of ceremonial importance. These directions are symbolized in the codices by trees, on the branches of which perch birds. It was believed that at the creation a red, yellow, white and blue tree were planted, one at each compass point.

The Aztecs possessed a double 52-year cycle based on the movements of the planet Venus. The Venus year consists of a fraction less than 584 days, 5 Venus years equalling 8 solar years of the Aztec type (2920 days). At the end of 13 times this interval 65 Venus years, 104 Aztec solar years and 146 Tonalamatls had passed, and the three counts coincided again for the first time. This great period of 104 years formed the double 52-year cycle. Actually the fractional loss of the Venus year had amounted to about four days at the end of this period, and the next Venus period started four days earlier in the Tonalamatl.

The Venus year was counted from the heliacal rising of the planet, the period of inferior conjunction preceding this being calculated at eight days. The reappearance of the planet was considered to be of ill omen. The holes in the roofs of houses, through which smoke from the fire escaped, were stopped up so that the light of the planet's rays should not enter the houses. The rays of light were looked upon as arrows shot by the Venus god, Tlauizcalpantecutli, and they were considered to bring ill to different classes of individuals in different years. In the 1 Acatl years, for example, rulers

THE CALENDAR AND THE FEASTS

were smitten, and in the 1 Olin years warriors and maidens were the victims. These beliefs are portrayed in different codices where Tlauizcalpantecutli with five

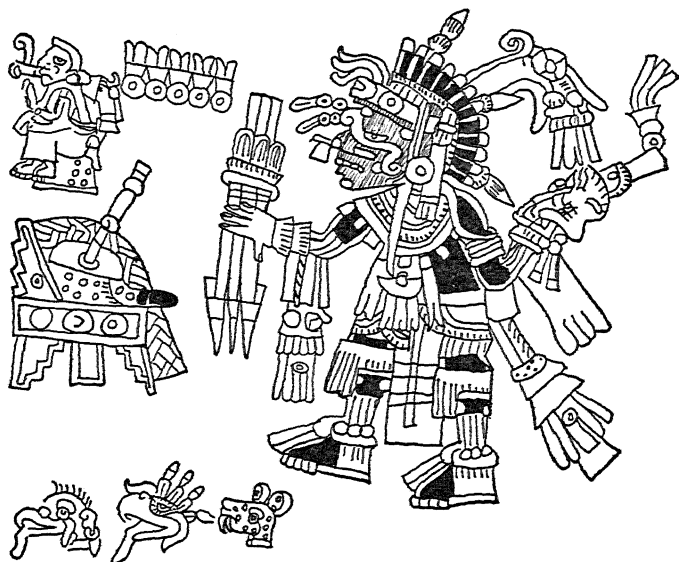


PLATE XXIV. TLAUIZCALPANTECUTLI

Venus god hurling spears at ruler's throne. Codex Vatican 3773.

white spots on his face, one on the tip of his nose and the others on the cheeks, hurls spears earthwards with the aid of his spearthrower, slaying kings and warriors. (Plate XXIV.) The white spots on his face show a connection with Maya practice, for in the Maya inscriptions the hieroglyph of the planet Venus consists of five circles arranged in a similar manner. To appease the

wrath of the Venus god a human sacrifice was offered at heliacal rising, and the devotees of the cult continued to offer copal incense and blood drawn from their ears and other parts of their bodies during the ensuing period of the planet's greatest brilliance.

A similar calendar to that of the Aztecs was in use among the Zapotecs of Oaxaca, but the day names differed. It is very probable that every tribe in the central and Southern Mexican regions possessed its own distinctive names for the days and months, but in most cases these have not survived. Inscribed dates on stone are fairly rare in the plateau region, and with very few exceptions those that have been recovered can be dated on stylistic grounds as belonging to the Aztec period. At the great site of Teotihuacan no calendrical inscriptions have been so far recovered. From this it has been argued that the calendar did not reach the Mexican plateau until quite late in history, and it has been claimed that it was introduced from Yucatan by Quetzalcoatl, the Toltec ruler in the twelfth century of our era.

It is clear that the calendar certainly did not originate in the plateau region, for several of the day signs represent animals not indigenous to this region. Among these are the howling monkey, glyph of the day Ozo-matli, the ocelot, glyph of the day Ocelotl, and the blue iguana, glyph of the day Quetzpalin. However, by the twelfth century Yucatecan Maya differed so much from the archaic Maya that many of the glyphs had become meaningless in name and representation. Never-

theless, from survivals in the Maya calendars of Guatemala we know that the eleventh day of the Maya Tonalamatl was originally called Batz—howling monkey—whereas the Yucatecan name for this day, Chuen, is meaningless, and the glyph bears no resemblance to a monkey. Similarly the name of the fourteenth day Ix has no meaning in Yucatecan Maya, but has the meaning of jaguar in the Kekchi-Maya language, and corresponds to the Aztec Ocelotl. Perhaps we would not be wrong in inferring that the archaic Maya name for this day meant jaguar, and has survived only in the Kekchi, just as we find Latin words surviving in one Romance language, but not in the rest.

Secondly, Mexican colonists settled in Nicaragua in Toltec times, carrying with them the Mexican day names spelt in Toltec fashion, but they did not apparently carry with them the worship of Quetzalcoatl. Had these settlers left their homes after the time of Quetzalcoatl they would undoubtedly have carried with them this new and very important religion. From this we can infer that the Tonalamatl existed in Mexico before the time of Quetzalcoatl.

From these two lines of evidence we might deduce that the Tonalamatl probably originated at a very early time in the lowlands among a pre-Maya people, and with maize, cotton, pottery making and fundamental religious concepts was among the cultural traits inherited by the later civilizations, both Maya and Mexican. In other words the Mexicans did not borrow their calendar

either directly or indirectly from the Mayas, nor the Mayas from the Mexicans, but both civilizations were co-heirs of an earlier culture. Presumably the Mayas added their system of reckoning in 20 and 400 year periods at a later date, for such a system was unknown to the Mexicans, whereas had the Mexicans received their calendar from Yucatan in the twelfth century, they could hardly have failed to take over also this method of reckoning years.

A brief outline of the principal Aztec feasts has been given in the list of the months. In order to supply a fuller insight into Aztec ritual and religious concepts, accounts of two important ceremonies are given below in full detail. The first is that of Tezcatlipoca. The account is taken from Sahagun's monumental account of the ancient Mexicans. The translation is free, and the punctuation and lengths of paragraphs have been altered.

"The fifth month is called Toxcatl. In it they make a special feast in honor of their principal god called Tezcatlipoca. He is also known as Titlacaoan, Yautl, Telpuchtli, or Tlamatzincatl.

"In this feast they kill a youth of a polished disposition. This youth had been kept for a year in idle enjoyment, for they said that he was the living personification of Tezcatlipoca. They had a large number of these young men set aside, and from them one was chosen and kept apart for a year as soon as the previous candidate had been sacrificed. The candidates who were

chosen from among the prisoners of war were all of noble blood, of good disposition, clever and without any corporal blemish. The youth who was to be slain was carefully taught to play on the flute. He was also coached in carrying the reed tobacco tubes, and to wander round smoking and smelling bouquets of flowers as was the custom of the Aztec nobility. The Calpixques, in whose power the youth was kept until chosen to act the part of the living god, took great pains to teach the candidates good manners, such as how to salute or address persons they met, for once they had been chosen for the part, every one who met them treated them with great reverence, kissing the ground [*i.e.*, touching the ground with the fingers, and placing them to the lips. This was the Aztec manner of showing humility]. If the youths became too fat, they were given salt water to reduce their weight.

“Once the youth had been chosen to die, he began to wander through the streets, playing his flute, smoking and smelling his bouquets of flowers. He was free to wander both by night and by day, but wherever he went he was accompanied by eight attendants dressed as though they were pages of the Aztec chief ruler. The chief ruler, once the youth had been proclaimed as the next to die in this feast, dressed him in costly and strange clothing, since he was now considered to be a substitute for the god. They painted his face and body and decorated his head with white feathers attached by means of resin. His hair reached to his waist.

"After dressing him they placed on him a garland of flowers, which they call Yzquisuchitl, and a long wreath of the same flowers hanging from the shoulder to the arm-pit on both sides. In his ears they placed ornaments like gold ear-rings, and round his neck a string of precious stones. From this hung a white precious stone which reached to the breast. A long lip-plug made of cockle [conch?] shell was placed [in his lower lip]. On his shoulders he carried a bag-like ornament, a palm's width square, made of white cloth with tasselled fringes.

"They placed gold bracelets on both arms around the fleshy parts above the elbows and strings of precious stones were wound round the fore-arms covering them almost entirely from wrist to elbow. They covered him with a beautiful cloak made in a netted technique and supplied with a very curious trimmed edge.

"They placed around his waist a piece of cloth called maxtlatl, which they use to cover their private parts. The ends, which hung down in front almost to the knee, were elaborately decorated, and the whole was about a palm in width. Gold bells were placed around the legs, and these tinkled wherever the youth wandered. On his feet were placed sandals which were very curious and covered with paint. In this manner was the youth dressed at the beginning of his year of impersonation.

"Twenty days before the actual feast they changed these clothes, with which he had made so much display up to then, and washed off the paint from his head

and body. They cut his hair short in the style adopted by warrior captains, tying it up in a lock on the crown of the head, and leaving a curious fringe. To the lock of hair was tied a tuft of feathers and rabbit hair decorated with gold and buttons. At the same time they married him to four maidens, whose company he enjoyed for the remaining twenty days of his life.

"These maidens also had been raised in great luxury for this rôle. They were given the names of four goddesses. One was named Xochiquetzal [goddess of flowers and pleasure], the second Xilonen [goddess of maize], the third Atlatonan [our mother, the water], and the fourth Uixtocioatl [goddess of salt, elder sister of Tlaloc].

"Five days before the feast, when the youth was to be sacrificed, they honored him as god. The Aztec ruler remained alone in his house, but all persons of rank followed him [the youth], performing dances and giving banquets attired in their richest clothing.

"The first day they made a celebration in his honor in the quarter called Tecanman; the second day in the quarter where the statue of Tezcatlipoca was kept; the third day on the little hill called Tepetzinco in the lake; the fourth day on another little hill called Tepelpulco, also in the lake. At the close of this fourth feast he and his women, who went to console him, were placed in a canoe with an awning, in which the Aztec ruler used to travel. Leaving Tepelpulco, they journeyed in the canoe to Tlapitzaoayan, near the Ystapalapan-Chalco

road, where there is a little hill called Acaquilpan or Cabaltepec. Here he left his women and the crowd, returning to the city unaccompanied save by the eight attendants, who had been with him constantly during the past year.

"They guided him to a small, poorly adorned pyramid at the side of the road, a league or nearly that from the city, and situated in an uninhabited district. On reaching the foot of the steps, he began to climb up unattended. At the first step he broke one of the flutes on which he used to play during his time of good fortune; at the second step he broke another and at the third yet another. In this way he destroyed all of them one by one as he climbed the steps.

"At the top of the pyramid the priests were ready for him, and as soon as he reached the top, they seized him and placed him on his back upon the stone block. Priests held his hands, legs and head, while the one with the knife plunged it into his breast with a great blow. Removing the knife, the priest thrust his hand into the wound, and tearing out the heart, immediately offered it to the sun. In this way they slew all those to be sacrificed [an untrue statement]. The body in this case was not thrown down the steps, as was the usual custom, but four priests carried it down to the court below. There they cut off the head and stuck it on a post called Tzonpantli [skull rack].

"In this way he who had been honored and showered with gifts for a year ended his life. They said that this

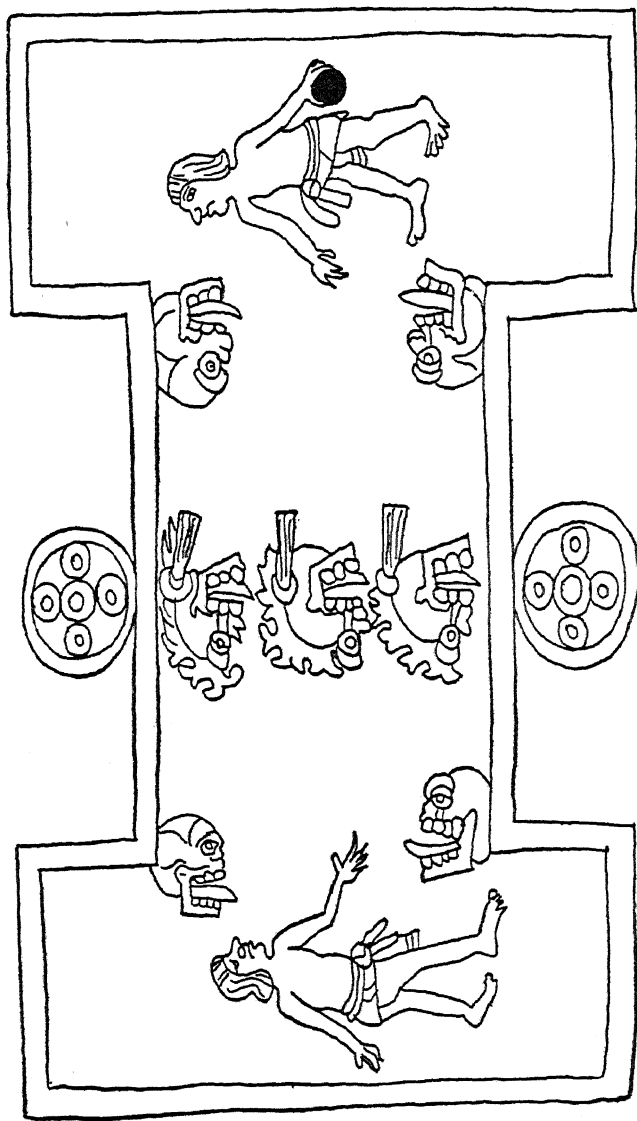


PLATE XXV. PLAYERS IN A BALL-COURT
Note the rings and death heads. Magliabecchi Codex.

ceremony signified that those who had had riches and pleasures during their life would in the end come to poverty and pain."

The second feast to be described in full is that held by the warrior group in honor of the sun every 260 days. The account is translated from that given by Duran, an early writer on Aztec history and customs.

"There existed in this land an order of knights who made a profession of arms. They had vowed to die in defense of their country, and not to turn their backs on the enemy even if ten or twelve attacked [one of] them at the same time. These knights considered the sun to be their god and the head of their order, just as the Spanish knights are under the patronage of glorious Saint James.

"All those who entered this order were illustrious and courageous persons. Only the sons of knights and nobles were admissible, persons of humble birth not being eligible however brave they might be. The feast of these knights and nobles was made in honor of their god, the sun, whom they called *Nauholin*, which means Four Movements. . . . [Duran goes on to state that this feast was held on the day 4 Olin. The reason for the choice of this day was that the present age, called "Four Suns," was supposed to have started on the day 4 Olin. The sun's regular name was Tonatiuh, but here, following a fairly common Mexican custom, he is given the day of his feast as a second name.]

"This temple [of the order] was situated on the

very spot where they are now building Mexico cathedral. It was called Cuacuauhtinchan, which means the house of the eagles. [Plate XIX.] The title of eagle or jaguar they gave to men who had done brave deeds as a sort of mark of honor to commemorate their bravery. Thus the house of eagles really meant the house of brave men. The metaphor was employed because the eagle is one of the bravest of birds, and the jaguar the fiercest and most savage of four-footed animals.

"At the top of this temple [pyramid?] there was a room next to a court, which as we said in the previous chapter, was about forty feet square and smoothly finished with lime. On one side of this court was this room of which I speak. Inside there was an altar, above which hung a cloth with a representation of the sun painted on it. This painting was in the shape of a butterfly with outspread wings, and around this there was a circle of gold with dazzling rays radiating from it. [The sign was not a butterfly, as Duran states, but the day sign Olin, which bears a slight resemblance to a butterfly. See Plate XXI.] The rest of the room was gaily decorated and well arranged. To reach this room there was a staircase of about forty steps.

"In this temple all the ceremonies practiced in the other temples were also performed. For instance, the idol was carried out in solemn procession to be shown to the people four times a day, and all the ceremonies of offerings and sacrifices were performed as in the case of the other gods. For this purpose they [the eagle

knights] had their priests and dignitaries with full rank and the same privileges as the other priests. They solemnized this feast in the following manner.

"This day [4 Olin] all the people of the city observed a strict fast. This was so rigorous that not even children or sick persons were allowed to eat until the sun, pursuing its course, was overhead at midday. At that moment the priests and ministers of that temple took some shells [conch shell trumpets] and trumpets and gave the signal to the people to assemble at the temple. This they immediately did with the same attention and haste as they now flock to Mass on Sunday.

"As soon as the people were assembled at this sound of the shells and trumpets, an Indian prisoner of war was brought forth. He was accompanied by a throng of nobles, who surrounded him. His legs were painted with white stripes, half his face was reddened, and white plumage was stuck on his hair. In one hand he carried a staff handsomely decorated with loops and knots of leather, in which feathers were inserted. In the other hand he held a shield with five balls of cotton on it. On his back he carried a bundle containing pieces of red ochre, eagle feathers, gypsum, pinewood soot, and pieces of paper decorated with stripes of raw rubber. . . .

"They placed the prisoner at the foot of the steps leading to the temple, addressing him in a loud voice so that all the people might hear. 'Sir,' they said, 'we beg you to go to our god, the sun, and salute him on our behalf. Tell him that his children, the knights and chiefs,

who remain here [on earth] beg him to remember us and favor us from where he is [in the sky]. Ask him to receive this small present which we send him. Give him this staff to walk with, and this shield to defend himself, together with the other objects which you carry in the bundle.'

"The Indian [prisoner], on hearing this address, replied that he would be pleased to do so. Thereupon he was released. Slowly he began to climb to the temple, stopping for a considerable time on each step. The delay on each step was according to instructions, for this dilatory climb symbolized the slow passage of the sun. When at last he had reached the summit, he walked to the stone called *cuauhxicalli*, which has in the centre the symbol of the sun. On to this he climbed.

"Standing there, he addressed in a loud voice the image of the sun hanging above the altar of the room, turning occasionally towards the real sun. As soon as he had concluded, four priests climbed to the top of the stone, each one ascending by one of the four flights of steps which, as I have said, the stone possessed. They took away the staff, the shield and the bundle which he carried; then they grasped his hands and feet. Next the high priest, ascending with his knife in his hand, cut the prisoner's throat, bidding him go with his message to the real sun [whom he would meet] in his next life.

"They [the other priests] poured the blood into the font. From there, passing down a canal, it spilt out in

front of the chamber of the sun and the image of the sun painted on the stone. As soon as all the blood had drained away, they opened his [the victim's] breast, and took out the heart. Raising it on high, one of them presented it to the sun, holding it aloft until it ceased steaming, and grew cold. Thus did the unfortunate messenger to the sun come to the end of his life, going [instead] to hell with his message, there to give an account of the great blindness in which the people yet lived.

"The sacrifice of the Indian had been witnessed by the whole populace without breaking their fast. The ceremony was so cleverly timed that it was exactly mid-day when the Indian ascended to the sacrificial stone. As soon as the throat cutting and the rest of the ceremony was concluded, the temple priests blew the shells and trumpets. This was the signal that the fast was over and all might now eat. The fast had been kept very strictly up to this moment. No one dared break it for fear of incurring the wrath of the sun, for all kinds of evils were foretold should they do so.

"As soon as the signal was given, all went to eat. Some retired to their houses, others, who had travelled a long distance, had brought their food with them, and ate it there. While the people were eating, the priests were not idle. First they took the bundle of presents, the staff and the shield, which the Indian had carried, and placed them beside the image of the sun. Then they took [the body of] the sacrificed man, and returned it to its owner [*i.e.*, the captor].

"He [the captor] solemnized the feast with the flesh, for the flesh of all sacrificial victims was considered sacred and holy. They ate it with as much reverence and with as many ceremonies as if it were some heavenly thing. The common people never ate this flesh, but only the nobles and chiefs.

"After eating their repast, all the populace returned on the signal being given with those instruments [*i.e.*, the conch shells and trumpets], which served in the same way as we now use bells. When the temple [the court?] was again full, the youths of the nobility came forth. Each one had some small knives in one hand, and in the other a bundle of thin smooth sticks of osier. Sitting down in their correct order, they practiced a peculiar form of self-sacrifice.

"This consisted of making wounds in the fleshy part of their left arms above the elbow. The wounds, which were about an inch long, passed between the skin and the flesh. Through these they passed the sticks one by one, drawing them out at the other end covered with blood. These sticks they threw down in front of the image of the sun. The one who drew most sticks [through the wound] was considered the most pious and possessed of most fortitude, and was accorded most glory. This particular sacrifice was only performed on the day of the feast. [Plate XX.]

"When the sacrifice was finished, they [the participants] went to bathe. Afterwards they brought out the drums, and made a great dance. In this only the chiefs

and nobles took part, the rest of the populace not being permitted to participate. In this dance the chiefs wore many beautiful jewels, curious featherwork and very fine necklaces. Especially was this the case with the knights of the [eagle] order, who had the symbol of their patron, the sun, on their shields and feather work."

It has been suggested that the great calendar stone (p. 165) was the sacrificial stone mentioned in this account. This is quite probable in view of the fact that the glyph 4 Olin occupies the most prominent position on the stone. Part of the stone has been broken off, and it is quite possible that it was originally square. Small steps of wood or lime-coated rubble may have existed on all four sides, as Duran suggests.

Only a fraction of the religious feasts of the Aztecs have been discussed in this chapter. Nevertheless, one gets a very forceful impression that the Mexican's daily life was so hedged in by these countless ceremonies and practices that a strict observance must have been well-nigh impossible for any one except the zealot. We should probably not be far in error in supposing that the average layman managed to get round many of the tabus and omens of bad augury with as much success as the average Christian avoids strict application of the advanced idealism of the New Testament. Whatever the priest and diviner may have thought, the Mexican man in the street probably reached the conclusion that the Tonalamatl and the continuous round of feasts were made for man, and not man for them. Probably he com-

THE CALENDAR AND THE FEASTS

promised accordingly in their observance, devoutly participating in those which most closely affected his well-being, but inwardly little moved by the feasts of the warrior group.

CHAPTER VII

PRIESTHOOD, SPORTS, AND WRITINGS

Need for Numerous Priests. Two High Priests. Sacred Priests of Tehuacan. Blood Drawing. Dress. Daily Life. Divination by the Calendar. Soothsayers. Auguries and Superstitions. Divination by Maize. Witch Doctors. Curing of Illness. Magicians. Sacred Ball Game. Used to Settled Disputes. Flying Game. Game Like Backgammon. Riddles. Dancing. Sometimes 3000 Participants. Instruction in Dances. Musical Instruments. Life of Eight Deer. Hieroglyphic Codices.

THE bewildering multiplicity of gods, the innumerable religious festivals and the large numbers of temples and sacred structures necessarily required a large and well-organized priesthood. Such existed, every *calpulli* having its own temple and priests in addition to the large tribal temples with their attendant sacerdotal organization. Torquemada claims that there were no less than 5000 persons employed in the service of the great temple of Huitzilopochtli in Mexico City, including priests of various classes, probationers, vestal virgins and boys from the schools. Although it may well be that this number is somewhat exaggerated, there is little doubt that the priesthood was of enormous importance both in numbers and in influence. It could hardly be otherwise with a people of such religious intensity as the ancient Mexicans.

At the head of the Aztec priesthood stood two priests of equal rank. One of these, who bore the title of *Quet-*

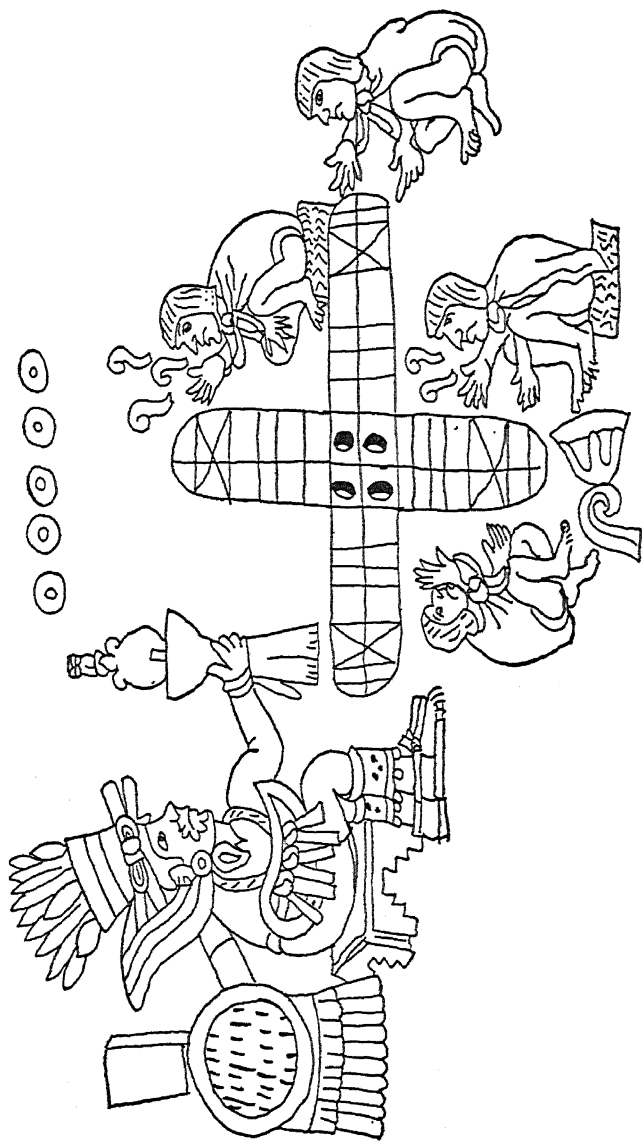


PLATE XXVI. PLAYING THE PATOLLI GAME

The patron god of games is seated on a stool, watching the game. Magliabecchi Codex.

zalcoatl Totec, was the high priest of the cult of Huitzilopochtli, the Aztec war god. The other was the chief of the order of priests of Tlaloc, and bore this god's name. According to Sahagun these were chosen entirely on the grounds of piety and wisdom by the council of elders of the tribe, but Acosta states that the priest of Huitzilopochtli must have belonged to a certain lineage, presumably that from which the Aztec chief rulers were also chosen. Below them was the priest in charge of the Calmecac, or tribal school for the sons of the nobility. The education here was largely of a religious nature (p. 41), and the position of chief instructor was considered of very great importance, since the holder would be largely responsible for the proper upbringing of the coming generation of civil and religious leaders. The cult of every important god had its chief priest, under whom were the ordinary priests, junior priests, corresponding roughly to the deacons of the Episcopal Church, and finally initiates.

Among the Totonacs of the Vera Cruz region there was a special order of priests of the maize deity Centeotl (p. 143), who had a very high reputation for sanctity all over Mexico. Only men over sixty years of age and of unblemished reputation could be elected. They were vowed to perpetual silence except when consulted on questions of policy or ritual. They wore fox or coyote skins and never ate meat. In addition to the advice they imparted, they were occupied largely in painting hieroglyphic codices.

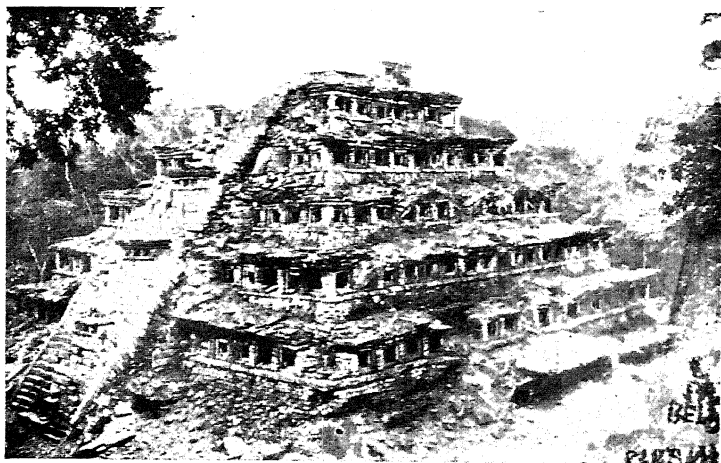
At Tehuacan there was another order of priests of very high renown, who were consulted by persons from near and far. Among those who sought their advice were the Aztec chief rulers, although their temple was outside real Aztec territory. A group of four held office for a period of four years, at the end of which time they were replaced by another group of four. During this period those in office underwent a rigorous course of prayer, penance and fasting. They slept on mats, using a stone for a pillow, and even in winter were allowed only a thin cotton cloak and cotton breech-clout as clothing. Except on feast days they only ate once every twenty-four hours, their meal consisting of one tortilla, weighing about two ounces, and a little posol. No other food was allowed them, not even salt or chili pepper, but every twenty days when a religious festival took place, they were free to eat as much as they wished.

Every twenty days they drew blood from their bodies by piercing their ears, and passing sixty reeds through the wounds. The blood-stained reeds, which were of the average thickness of a finger, were piled up in a gradually mounting heap, until at the end of the four years of office each priest burned his pile in front of the image of the patron god. As a result of the abnormal life they led, for in addition to fasting, they spent long periods in vigil, they received many visions. The advice they gave was based on these, and were one of the group to die during his period of office, dire calamity was expected to overtake the whole community. The penalty

for a serious lapse from piety during the incumbency of this office was death.

Generally speaking Mexican priests wore long white cotton skirts and a fringed cape of the same material knotted over one shoulder. Aztec priests never cut their hair, nor permitted it to be combed or washed. As the blood of sacrificial victims often spurted over the priest's head, one can imagine its condition. The early Spanish conquerors, who themselves never paid much attention to the precept that cleanliness is next to godliness, were full of disgust for this revolting custom, writing that the priests were not only lousy, but that their heads smelt in a disgusting manner. There is no doubt that this custom was followed for religious reasons since the ancient Mexican was as a rule scrupulously clean. The hair was worn in long hank-like masses, but for occasions of mourning it was worn loose.

For religious ceremonies priests blackened their faces, hands, arms and legs. For special occasions a peculiar mixture of insects such as scorpions, tarantulas, wasps and centipedes was ground up with poisonous snakes, tobacco and peyote, and the whole burned. The ashes, after being offered in the temple, were used to blacken the priests' faces. It was believed that this admixture gave its wearer additional courage. Small boys from the schools were sent out to get the raw material, and rapidly became expert in catching all the required specimens of poisonous vermin. Among the Totonacs priests were consecrated after election by being anointed with a liquid



Photograph by Ministry of Education, Mexico

Pyramid near Papantla, Vera Cruz



After Peñafiel through courtesy of Doctor Robert Redfield

Xochicalco. Feathered serpent sculpture

PLATE XXVII

composed of crude rubber and children's blood, crude rubber being one of the insignia of rain and fertility deities.

In addition to the regular religious services and special festivals, each priest made an offering of his own blood and copal incense four times during the day and five times during the night. This was done in honor of the sun god, who was saluted as Tonatiuh during the day, while at night he was worshipped under the name of Yoaltecuhtli. The priests and initiates also spent long periods chanting prayers to the accompaniment of hollow log drums. A sacred fire always burned in each temple. This was only put out at the end of the fifty-two-year period (p. 198), and were it to be allowed to go out through carelessness, a serious calamity affecting the whole community was to be expected. Needless to say the person responsible for such carelessness was severely punished.

In addition to the idols, many incense burners and braziers for the sacred fires were kept in the temples. Most of the vessels used in the religious services were of pottery, but some were of gold or silver. Priests kept supplies of maguey thorns, reeds and cord for passing through the wounds inflicted for drawing blood. The blood of sacrificial victims was sprinkled on the idols by means of a kind of hyssop of red feathers. The sprinkling ceremony was the cause of the thick coatings of blood on the temple walls, of which Peter Martyr speaks with horror (p. 167).

Junior priests made frequent pilgrimages into the forests, sallying forth at night to make offerings of pine wood and copal to the mountain gods. On these occasions they covered themselves with the peculiar concoction of poisonous insects, snakes, tobacco and peyote mentioned above. This was believed to give them "Dutch courage," so that they had no fear of the woods at night. Sometimes on these nocturnal expeditions they heard a peculiar sound like that of a man cutting down a tree. This was considered a very bad omen, presaging grave misfortune. The ancient Mexicans seem to have had a great fear of going out at night in the forest unaccompanied, a fear shared by their modern descendants and the modern Mayas, for the latter have a strange repugnance to going out alone after dark.

The regular priests were occupied with the temple functions and sacrifices, the hearing of confessions, fasting and penance, chanting and the supervision of sacred dances. The junior priests slept in the Calmecac, but there were probably living quarters attached to all the important temples. Of these there were a very large number in Mexico City, for in addition to those of the normal Aztec gods, there were also edifices dedicated to the worship of foreign deities. In their willingness to accept deities of conquered peoples, the Aztecs resembled the Romans. All priests had an intimate knowledge of the Tonalamatl or 260-day sacred almanac, for they were continually engaged in consultations as to suitable occasions to undertake any task or celebrate any

event. By this means the priesthood controlled every action of the people from the declaration of war by the tribe to the building of a bird coop by one of its humblest members.

In contrast to the priests, who were professionals supported by the whole clan or local calpulli, and usually celibate, there were a large number of humbler soothsayers and healers, who carried on their normal occupations, occasionally serving in these secondary capacities. They were largely consulted by the humbler agriculturalists as to when to sow or harvest, as well as for domestic reasons. Their answers were governed either by the Tonalamatl or by visions which came to them after eating peyote or certain other narcotic herbs (p. 231).

There were a very large number of superstitions current among the people. The calls of certain birds, such as the owl, presaged death, and similarly if a rabbit or a skunk were to enter the house, the inmates might expect bad luck. Rats played an important part in these beliefs. A person who ate food that had been gnawed by rats would be falsely accused of theft or adultery. If an occupant of a house committed adultery, the rats would eat his or her clothing. One imagines that this superstition must have been the cause of many baseless matrimonial recriminations. If a householder wished to rid his home of rats by setting traps for them, he first placed the corn-grinding roller outside, otherwise the roller would warn the rats of the danger that awaited them.

There were also a number of superstitions connected with the preparation of maize. If one were to lick the grinding stone, one's teeth would fall out. The curling of tortillas on the griddle announced a visitor or the return of an absent husband. A woman who broke her grinding stone would die within a short time. If a person were to upset some grains of corn on the ground, he must pick them up, otherwise they would invoke a curse on him for not showing them due respect. If maize cobs were burned in a house where a baby had been recently born, he would become spotty and covered with freckles unless one just touched the child's face with the cobs before placing them on the fire. A soldier, who ate a tamale that had stuck to the side of the pot, would thereafter prove a poor marksman. Green corn eaten at night would cause toothache unless it were first warmed at the fire. If the first fire lit in a new house burned well from the start, the inmates of that house would live long and happily; if the fire burned badly, the contrary might be expected.

Two peculiar beliefs existed in connection with the growth of children. It was thought that were a person to step over a child, the latter would cease to grow, but the remedy was simple. All one had to do to break the spell was to step over the child again in the contrary direction. When an earthquake was felt, parents lifted their children up by their heads, or, it was believed, they would not grow any more. Children were not allowed to play around the corner posts of the house, for it was

held that proximity to the posts would cause them to develop into liars. Merchants had the peculiar superstition of carrying the arm of a female monkey with them. This improved their salesmanship powers. If merchandise still remained unsold at the end of the day, the merchant offered chili peppers to the monkey arm to induce higher-powered salesmanship the following day. Among the Huastec a man who had died from the bite of a certain snake must be buried face downwards, otherwise serious floods would devastate his native town.

Divination was largely practised by the soothsayer-medicine man. A common method to know how long a sick person would live was by measuring the left forearm with the right hand. The palm was laid across the arm, and the distance measured off. If at the last measurement the outside of the hand coincided with the points of the fingers, the patient would promptly die. If there was a wide space over, the patient would live for a long time. The medicine men bunched up their hands or lay them flat to reach the desired result, which probably depended on a shrewd examination of the patient before divining his fate.

Often maize was used in divination. Grains of maize were thrown into a jug of water. If all sank to the bottom, good fortune might be expected; if some floated on the surface, misfortune or death was to come. The medicine man controlled these results by a careful selection of the grain he wished to employ, since good

grain sank immediately to the bottom, whereas rotten or worm-eaten grain floated. In another method twenty-five grains of maize were taken. Four grains were placed in each corner of a mat, the sorcerer holding the remaining nine in his hand. Passing the handful over each corner group in turn, he threw the nine grains in the centre of the mat. If the majority fell face upwards good luck might be expected.

A sick child was held over a deep bowl of water. If the face was clearly mirrored in the water, recovery would take place; if the reflection was blurred, the child would die, or if it lived would be pursued by bad luck.

All these divinations were accompanied by set prayers, of which I shall quote only that used with the divination last cited in connection with holding a child over water.

"Behold now my mother, jade, you with the skirt and huipil blouse of jade stones, you the white woman. Let us see if this child is sick because her star, her good luck has deserted her." The mother with the jade skirt and huipil is the goddess Chalchiuitlicue, goddess of water. Naturally she is invoked in this ceremony that involves water. The reference to a star may be due to European concepts having influenced the priest who gives this prayer. The good luck refers to the deity to whom the child has been dedicated.

In all cases of sickness it was first necessary to find out by divination what caused the sickness. The Mexican, like most primitive peoples, did not believe that illness

was due to natural causes. It might be caused by the sorcery of some evilly disposed person, or by bad winds, or be sent as a punishment for evil living, or some lack of respect toward a deity. Divination was primarily directed to finding out which of these was the cause of the illness. If the divination showed that an individual was responsible, the diviner proceeded to find out who was the author.

Counter magic was the chief means of curing illness, but herbs and other remedies were used as well. Toothache was treated by dropping a little burning copal on the offending tooth. Swollen throat was treated by covering the swelling with arnatto and then squeezing. Sometimes the soothsayer pricked the sore place with a needle a large number of times, as though he or she were tattooing the patient. Copal mixed with water was applied as a poultice to inflammations. Peyote cactus was also very frequently used as a medicine as well as a plant closely allied to Jimson weed. These last remedies owed their efficacy to their divine nature.

Of the divinatory narcotics that known as *ololiuhqui* (*Datura meteloides*) was the most important. The plant was considered particularly sacred, and packets of it were placed on many household altars and were the recipients of prayers and offerings, such as food and copal incense. These packets were considered so sacred that they might never be opened, nor even removed from their original locations, and the duty of guarding them descended from father to son. In many ways the

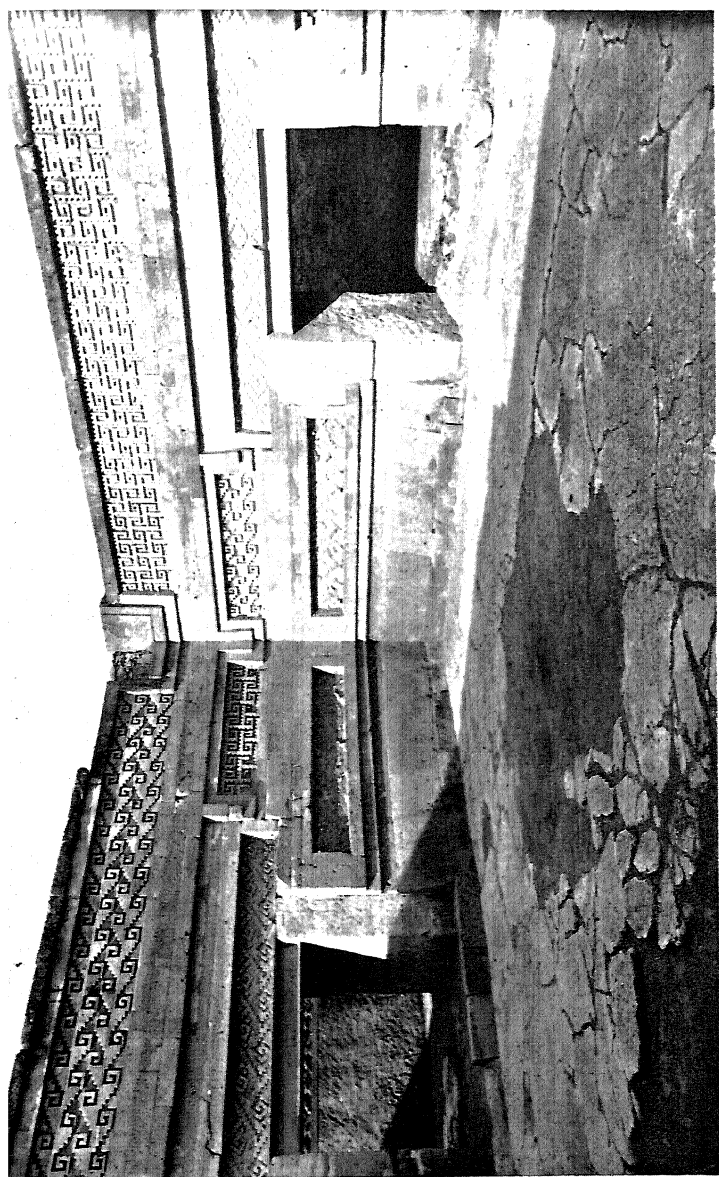
ololiuhqui cult is reminiscent of that of the sacred bundles of the plains Indians of North America.

The medicine man, on taking some ololiuhqui, had a vision in which the ololiuhqui deity appeared to him and supplied the answer to the problem over which he had been consulted, whether it were the cause of some disease, the whereabouts of a lost relative or the location of stolen property. These medicine men, at their initiation, were believed to die, returning to life after three days, during which time they received their powers from gods or dead relatives.

In many of their cures the medicine men used tobacco, frequently pulverized when green and mixed with lime. Tobacco, too, was a divine plant, being inferior in this respect only to ololiuhqui, peyote and one or two food plants. The employment in medical work of daturas and tobacco mixed with lime is very probably of South American origin.

Often the medicine man used to suck the patient's chest or stomach, and then, producing small stones, bones or hair, claim that he had sucked them out of the patient's body, thereby curing him.

Apart from the medicine men and priests there were also magicians who combined divination and medicine with conjuring tricks. The Huastec had a reputation all over Mexico for their magic. It is related that they were able to produce a spring with fishes swimming in it in the middle of a waterless country, or produce an illusion of a burning house where no house existed. It



is even claimed that they killed themselves, cut themselves in pieces, and then brought themselves back to life. The Quiche Mayas have traditions of similar tricks performed by their heroes. One is reminded of the tricks of the Indian fakirs. Among the Mayas the ceremony of running bare-foot across red-hot embers was regularly performed without apparent hurt to the performers, and it is quite probable that the Aztecs had a similar ceremony. This fire ceremony is of wide distribution in the Old World.

Closely connected with religion and the priesthood was the sacred ball game. Every town of importance had at least one court in which to play, and cities of importance had several. These were always placed in close proximity to the important temples. The courts varied in size; 200 feet long was not exceptional with an average breadth of some 30 feet. In ground plan they resembled two T's placed base to base, for while long in the centre they broadened at the ends. (Plate XXV.) The sides of the courts were formed by walls, of an average height of about fifteen feet. These were faced with smooth slabs of stone interspersed with carved decoration. The walls of the broad ends were usually very low. High up half way down the length of each wall was placed a stone ring, the hole through the centre of which was about two feet in diameter. Often the carving was made so that a figure of Xochipilli, the patron god of games, held the ring in his arms. Around the court were planted trees, particularly palm trees, and

sometimes temples were attached to the courts. The game was played with a rubber ball, the players hitting it with the hips or the knees, for it was forbidden to hit the ball with the hands or feet. However, beginners and indifferent players were, apparently, allowed to use their hands and feet, but this wasn't considered the real thing. The players on one side were supposed to put the ball through the ring on one wall, while their opponents endeavored to drive it through the other ring. This, however, very rarely happened. The games were always well attended, the watchers standing on top of the walls that flanked the court.

Custom decreed that in the event of a player driving the ball through the proper ring, he was entitled to the clothes of the onlookers and any possessions they might happen to be carrying with them at the time. Whenever this happened a regular scrimmage developed, the victor's friends aiding him to catch onlookers and strip them of their possessions before they could escape. However, this event was so rare that the rooters ran little risk of literally losing the shirts off their backs.

One early Spanish writer, who had witnessed many games, says that sometimes the play would last an hour without the players once missing a hit with hip or knee. Apparently it was not entirely unusual for a player to die of exhaustion after a very hard game.

The descriptions that have come down to us of the method of playing are sometimes vague, for we do not even know how many players there were on each side.

A green or black line ran along the ground from ring to ring, and it was necessary for the ball to cross this line to save a fault. It would seem that the wide ends had to be defended, and that if the ball entered these courts the side that had driven it there scored. In addition to the right of seizing the property of the onlookers, the player who scored a ring shot was given a prize of featherwork or clothing, and every one gathered round him, dancing and singing his praises as a renowned player. Indeed, the fame of a first-rate player was bruited far and wide, and his exploits discussed. In pecuniary reward alone he failed to rival a Babe Ruth.

A good player also added to his skill by appropriate magical ceremonies. A simple method to insure victory consisted in placing the grinding stone and griddle in one's home upside down and placing the grinding roller in one corner of the house. At night a player placed the rubber ball in a clean plate and hung the leather hip and knee pads on a pole. Then squatting down in front of them, he proceeded to pray to them and a large number of other deities including those of games and sport, begging them to grant him victory in the morrow's play. When the prayer was concluded the player burned incense in front of the instruments of play, finally offering them food and pulque. The vigil was kept up all night, but at dawn the player ate the offerings he had made.

Sometimes games were played to decide personal arguments or tribal quarrels. Thus the chief of one tribe

would play against another tribal chieftain to settle some point of difference. Nevertheless games were usually played for stakes, poor persons betting with maize or other produce of their farms, while those of rank staked jades, featherwork, gold and other valuable possessions. There were many inveterate gamblers, and frequently a man would gamble his own liberty in a ball game or some other game of skill or chance.

A peculiar religious function symbolizing the passage of the year was held in all the principal towns once a year. A very high pole was set up in an open space. There was a small platform at the top of the pole, and to this ascended four picked performers. After dancing for some time on the narrow platform, each player, who was dressed in a distinctive costume to represent various different birds, attached to his belt the end of a rope wound round the pole. Then one by one the performers cast themselves off the platform, swinging round and round the pole, as the rope to which they were attached gradually unwound. The lengths of the ropes were so adjusted that the performers reached the ground after making thirteen revolutions in the air. The four performers by each making thirteen revolutions symbolized the fifty-two years into which the small Aztec cycle of years was divided. Some of the players swung in the air with only their feet attached to the rope. This ceremony still survives as a popular amusement in outlying districts of Middle America, for it has been reported in recent years from Papantla in the state of

Vera Cruz, and from more than one town in Guatemala, the latter suggesting that it was also a Maya custom. Modern poles are often as much as one hundred feet in height.

A favorite game of the ancient Mexicans resembled our modern ludo. The game, which was called patolli, was played on a mat on which was a design like a St. Andrew's cross. (Plate XXVI.) This was marked off into a series of little sections. The dice were beans, the surfaces of which were painted white and numbers painted on them. Each player usually threw five beans, and advanced down the course accordingly. Tylor, the great English anthropologist of the nineteenth century, believed that patolli had been derived from the Hindu game parchesi, and used this close resemblance as an argument for Asiatic influences in ancient Mexico.

In another somewhat similar game scoring was made with sections of a bamboo-like reed slit down the centre. These were thrown on the mat, and a point scored for each reed that fell with the hollow centre upwards. A similar game exists to the present day among the Tarahumare of northern Mexico. Just as the crap shooter talks to his dice, the players of these games used to speak to the beans or reeds, invoking their aid. The ancient Mexicans went further, for they burned incense to the mat and dice to win their favor. Large stakes were gambled on these games of chance as on the ball game.

Riddles and conundrums supplied an innocent form of entertainment popular among the Aztecs as well as

other peoples of Middle America. A few examples of these are given below:

Q. What is it that one catches in a black forest and kills in a treeless bare country?

A. Lice, which are caught in the hair and killed on the thumb nail.

Q. What is the mirror that resides in a house made of pine branches?

A. The eye behind eyelashes.

Q. What is it that goes through a valley with its entrails hanging out behind?

A. The needle when one is sewing. The threaded cotton is the entrails.

Q. What is the blue gourd with toasted maize grains scattered on it?

A. The blue gourd is the sky; the toasted maize grains are the stars.

Q. What is it that howls when one scratches its ribs?

A. The bone rasp used as a musical instrument.

Dances played an important part in religious life. They wound up practically every important festival, sometimes lasting for several days, or rather nights, for most of the dancing took place at night. In the great majority of dances the sexes were kept apart, the most important exception being the dance held in honor of the deity Huitzilopochtli, when men danced with their arms round the women's shoulders (p. 184). Sometimes, however, men impersonated women in the dances, and on other occasions women danced alone. Although there

was great variation in the different dances, it would be tedious to enumerate them. Instead a description of a dance held in Montezuma's honor is given below. The account is somewhat abbreviated from that given by Gomara.

"After eating they started to execute a dance of rejoicing and goodwill, called Netoteliztli. Long before the dance commenced they stretched a great mat over the floor of Montezuma's patio, and on this they placed two drums. One was small of the type they call Teponaztli, the other large and high. With these as an accompaniment they sang cheerful, happy songs or some romance in honor of the past kings, recounting their wars and victories, the risks they ran and such matters. These adventures were sung in regular verse. When it was time for the dance to start, eight men whistled loudly, whereupon the drums were beaten softly, and the arrival of the dancers was no longer delayed. They wore beautiful cloaks, some white, some red, green or yellow, and all decorated with rich embroideries. In their hands they carried bouquets of roses, feather fans or fans made of both feathers and gold, and many carried wreaths of sweet-smelling flowers. Many too wore feather head-dresses or masks in the form of heads of eagles, crocodiles, jaguars or other wild beasts. Often as many as 1000 took part in the dance, and the number never fell below 400.

"All who take part in the dance are chiefs or persons of rank, and the higher the rank of a performer, the

could be heard at distances of several miles. The second type of drum was upright, standing on three wooden legs and with its mouth covered with deer hide or occasionally snake skin. (Plate VII.) The outsides of both kinds of drums were elaborately carved. Animal figures, gods and religious scenes were frequently depicted.

Four-fingered flutes of bamboo or pottery were also used. Those of pottery were sometimes carved with human heads or other devices. Smaller whistles with two-finger holes were much used, and are found in large quantities in Aztec deposits. They generally carry conventionalized birds in low relief. The Mexicans possessed no string instruments with the possible exception of the musical bow. This simple instrument with a gourd resonator is used at the present time in many parts of Middle America, but may be of African origin.

The carapaces of turtles were beaten with antlers, and rasps were made from the cores of conch shells or by notching human bones, preferably femurs. The sound was produced by rubbing a stick or antler along their surfaces. Conch shells with their tips sawn off served as trumpets, the sound carrying a very long distance. Smaller univalve shells strung on strings were worn on the legs and arms, producing a pleasant sound as they jingled together when their wearer danced.

The same effect was produced by small clapperless bells worn in a similar manner (see p. 94). These were usually of copper, but occasionally of gold. More in the nature of curiosities were whistling jars of the same

type as those found in the Late Chimu horizon of ancient Peru. In Mexico these were never common as in Peru. The vessels have two compartments joined by a narrow passage. As the water is poured out through the spout, air, rushing into the second compartment through a very small intake, causes the whistling sound. The same effect is also produced by swishing the water from one compartment to another.

Simple whistles were also manufactured to imitate the calls of deer and other wild animals. These were used by hunters to decoy game.

It can be seen that the range of musical instruments was very restricted. Indeed, the Aztecs, like most American Indians, were not a musical nation. The modern Indians of middle America have, however, taken to the marimba, an importation from Africa, with great gusto, until now it has become the national musical instrument of Guatemala and to a certain extent of Mexico as well. No examples of ancient music have survived, but we have translations of a number of poems or hymns of a religious or historical nature. In many cases these reveal a high standard of poetic imagery such as would be expected from a people so devoted to oratory. Unfortunately many of them are couched in metaphorical language, containing so many obscure references of a symbolic or religious nature, that they have little meaning for us.

Although many of the traditions and historical events sung at dances and festivals were transmitted orally,

closer he dances to the drums. They dance in two long lines with linked arms one behind the other. Two well-trained dancers head the lines; the others follow them in their movements. When the two leaders sing the rest reply, or if the arrangement calls for it, only a few. All together they raise or lower their arms and heads, achieving a graceful unison as they move together as though they were all one single dancer.

"At the start they dance slowly as they sing romantic histories. Singers do not raise their voices, dancing with serious mien, while the drums are softly beaten. As they get worked up, they start to sing cheerful songs and the pace of the dance is quickened. Soon all are dancing rapidly and with great animation. As the dances last for a long time, there are intervals when servers bring cups (of pulque). Sometimes certain men start to imitate the men of other nations, wearing their clothes and burlesquing their speech. They also indulge in other kinds of buffoonery, pretending that they are drunk or crazy, or imitating old women. These turns cause great amusement and laughter among the dancers and on-lookers. All those who have seen this dance, say it is a sight well worth seeing and better than the *Zambra* dance of the Moors which is performed here in Spain. It is better still if women dance instead of men, but in Mexico the women do not dance this in public."

Torquemada states that in the really big dances as many as 3000 or 4000 take part. A favorite dance of the Aztecs was held in honor of Xochiquetzal,



Photographs by Professor Charles J. Chamberlain

PLATE XXIX. INTERIORS OF THE PALACE ROOMS, MITLA

goddess of flowers and dancing. A bower of roses was erected, and in this the statue of Xochiquetzal was seated. Close by imitation trees decorated with sweet-smelling flowers were set up. While the dance proceeded, youths dressed in costumes made of multi-colored feathers to imitate birds and butterflies climbed up these trees. Next they passed from branch to branch, pretending to sip the dew on the flowers. While they were engaged in this task, priests issued from the temple armed with blow-guns, and taking aim, pretended to shoot them down.

In another dance the performers wore masks of old hunchbacks, and this dance provoked great mirth. Some of the dances, however, were of an obscene nature, and were probably performed in connection with fertility rites to assure successful crops.

Great care was taken in instructing the young men in the manner of dancing, for this formed an important item of education in the calpulli schools. At the same time as the boys learned the dances, they were acquiring a good knowledge of tribal tradition and lineage.

Musical instruments were used in all ceremonies and dances, but the range of these was small. There were two distinctive types of drums. The Teponaztli, already mentioned, was made of a section of log laboriously hollowed out so that a thin tongue of wood projected forward from the tops of both ends. Music was produced by striking these tongues with drumsticks, the knob-like ends of which were tipped with rubber. A deep sound was emitted. Early writers claim that this

similar records were also kept in hieroglyphic books. Some years ago the life history of an individual named 8 Deer was worked out by Mr. J. Cooper Clark. His adventures were found depicted in various allied codices, all dating from a period before the arrival of the Spaniards.

He was born in the year 12 Acatl, corresponding to the year A.D. 1439, and, following a fairly general Mexican custom, was named 8 Deer since he was born on that day (8 Mazatl). His father similarly was named 5 Cipactli and his mother 9 Quauhtli. He had two sisters and one brother. One sister was two years older than he, the other sister was a year younger, and his brother was four years younger. Various scenes in the codices represent events in his life. In one scene we see him playing in a ball court with an individual named 1 Olin, and between the ages of twenty-one and thirty he is almost continuously engaged in warfare. During these campaigns he took part in the capture of no less than twenty-six towns and villages. Over and over again we see him hurling spears with the aid of his spear-thrower into some town.

One scene shows him undergoing the rite of having his ears pierced, presumably for the insertion of ear-plugs. Another scene shows the piercing of his nostrils for the insertion of a nose-plug. This event takes place when he is thirty-four years of age. He lies on his back on a kind of couch, on which is spread a jaguar skin, while the priest, holding his nose with the left hand,

is on the point of piercing his nostrils with the pointed bone instrument he holds in his right hand. This ceremony was a mark of honor. Previous to this, but in the same year 7 Calli, 8 Deer is shown bringing in a prisoner with a rope around his neck, and perhaps this capture qualified him for the nose-piercing ceremony. Two years later we see him kindling the sacred fire in the usual method of twirling sticks. (Plate XVI.)

In 1474 his brother 9 Xochitl, then aged thirty-one, is sacrificed in his presence. Although this must have been a severe shock to 8 Deer, we must remember that death by sacrifice was a fate to be expected by warriors, and by dying in this manner, one was assured of entrance to the land of the sun instead of the less delectable underworld ruled over by Mictlantecuhtli. Apparently 9 Xochitl was sacrificed by his fellow tribesmen, for had he died at the hands of enemies, 8 Deer would scarcely have been present at his death.

Another scene shows 8 Deer and other chiefs in a canoe. Maritime shells clearly demonstrate that the water shown is the sea, and not a lake. 8 Deer and his companions are armed, and obviously are on the war-path, probably on the point of attacking a coastal town. The attack must have been successful since the next scene shows the sacrifice of a captured chief. In 1486 8 Deer was the aggressor in a gladiatorial fight similar to that described on page 176 and illustrated on Plate XXII. The weeping captive is tied to a circular stone, and defends himself with mock weapons. An adjoining

scene shows the prisoner bound to a wooden frame, where he is speared to death. (Plate XIV.)

In the year 13 Acatl (1479) he marries a girl called 13 Coatl. As he is now forty years old, the marriage is presumably not his first, for most Mexicans married at about the age of twenty. Two years later a boy, 6 Calli, is born. Another scene shows the parents, 8 Deer and 13 Coatl making a thank-offering of copal and maize for the safe deliverance of the child.

At the age of fifty-two 8 Deer's life comes to an abrupt close. The year is 12 Acatl, the same name as the year in which he was born and the year in which Columbus discovered America. Apparently he was taken prisoner in an attack on a city. The last scenes show him stretched out on the sacrificial block while a priest plunges a knife into his breast to remove his heart in accepted Aztec style. Eleven days later, on the day 12 Calli, his body was cremated. The codex depicts his mummy bundle tied up and adorned with a feather head-dress ready for the cremation ceremonies.

The careers of other individuals can also be traced through the codices, although none, apparently, with as full detail as that of 8 Deer. Undoubtedly he was an important personage, but it has not been possible to identify him with any particular town or people.

The Mexican hieroglyphic codices, however, treat little of individuals, but devote much space to religious matters, and divinations as to lucky and unlucky days. Although many of the deities can be identified and some

of the ceremonies recognized, we are still far from possessing a thorough grasp of the contents of these books. One can hazard a meaning for many of the scenes, but there is no way of proving or disproving one's theories.

Some codices, apparently, were devoted to the listing of tributes paid by vassal peoples of the Aztecs, others to the history of the Aztecs and other tribes, while a third class may have been filled with legal matters (p. 111). Of the first class there are no strictly aboriginal survivals, but the Mendoza codex, a prized possession of the Bodleian Library of Oxford University, is a copy on European paper of an Aztec tribute roll, and contains in addition much information on the upbringing of children, the ranks of different classes of warriors and other invaluable material. It was made by native scribes soon after the conquest, and is accompanied by a Spanish translation.

Of the truly pre-Columbian hieroglyphic codices only fourteen have survived. Five of these are in England, four in Italy, two in France, one each in the United States, Austria and Mexico. Except the last and the one now in the United States, all probably formed part of the loot sent over to Europe by Cortez and other conquistadores. At the time of the Spanish conquest there must have been many hundreds in existence, but nearly all of these were destroyed by church authorities as works of the devil. All that we can say is that the Mexican codices have been luckier than those of the Mayas, since only three of the latter have survived to the present day.

The hieroglyphic books consisted of a single long sheet, of an average width of six or seven inches and in one case as much as thirty-four feet in length. This sheet was folded up screen fashion. At each end were covers of wood or hide to protect the contents. In one case jade ornaments were let into the wooden cover, and have survived to the present time. The sheet, which was painted on both sides with the text, was made of a coarse maguey or amatl paper or hide. The surface of this was covered with a very thin coating of fine lime to receive the text. The pictographs and hieroglyphs were painted in a wide range of colors. These included red, blue, green, black, white, yellow, orange, brown and purple. Most of the prime colors were shown in more than one shade, and, for the most part, were of vegetable origin. All colors were outlined in black.

The text was read from left to right across the folds of the page, both back and front. Sometimes the sheet was divided into two or three sections by horizontal lines. In that case the text of the lower section or sections was read after the top section was concluded. The texts were a mixture of hieroglyphic and pictographic writings. Hieroglyphs were used for the day signs (Plate XXI), for the names of towns, for the names of persons, such as 8 Deer, for numbers and for certain objects, such as gold, jade, etc. Hieroglyphs for towns were made on the same principle as rebus writing. Thus Mazatlan's glyph was a deer's head, since *Mazatl* means deer in Aztec. The glyph of a town called Ecatepec was



Courtesy of Field Museum, Chicago

PLATE XXX. OAXACA POTTERY

Note the ears of corn on the funerary urn, the "scroll and fret" pattern on the large tripod bowl, and the feet patterned as snakes of the bowl in the centre

written by placing the head of the wind god above the glyph for a mountain. The Aztec equivalents of these are *Eecatl* and *Tepec*. Similarly the glyph of the Aztec ruler Itzcoatl was a snake from the body of which project obsidian knives. *Itztli* means obsidian knives, and *Coatl* means snake. (Plate XXIII.)

The Mexican numerical system was, like that of the Mayas, vigesimal. Numbers 1 to 19 were written by a corresponding number of circles. Twenty was indicated by a conventionalized banner. Four hundred, the next highest digit, was expressed by a drawing of a pine tree, and the next unit, 8000, was shown by a pouch for holding copal. These numerical glyphs occur frequently in the tribute rolls. (Plate IX.)

There were certain conventionalized pictures which were well on the way to becoming glyphs. The conquest of a town, for instance, was shown by a temple with a spear driven through it, and the glyph of the town in question juxtaposed, or simply by the glyph of the town with a spear driven through it. Similarly a prisoner was shown as being dragged along by his hair.

Other scenes, such as many described in the life of 8 Deer, were shown by means of pictures, hieroglyphs being employed only for the dates and the names of the participants. Needless to say, the glyph for 8 Deer was written with the day sign for deer (*Mazatl*) with eight dots attached. (Plate XVI.)

Paper, called *Amatl*, was largely used for sacrificial purposes, and for ornamenting statues of deities. Sacri-

fices of paper covered with crude rubber were particularly common in the Tlaloc rites. This same paper is still made in one or two small Mexican towns. It is now cut into human and other shapes, and employed in sorcery—a sad degeneracy.

Maps were also made, and paintings of different objects were made for informative purposes. Thus when Cortez landed on the Mexican coast, paintings of the Spaniards, their horses, ships and other novelties were made and sent to Montezuma to supplement verbal information.

Historical codices also existed, giving the migrations of the Aztecs, and a general outline of their history. Migrations were shown by painting footsteps passing from the hieroglyph of one town to that of another, together with the hieroglyphs of the dates.

Actually the codices were more in the nature of mnemonic aids. Regular stories were probably attached to each historical picture, and the teller, by an occasional glance at the text could preserve the sequence of the events he was narrating. Primitive story tellers develop an extraordinarily retentive memory, unknown in modern civilization, since we can fall back on the written word to refresh our memories, and the accuracy with which long genealogical tables were recited in Polynesia, for example, is almost unparalleled in civilized communities. Similar retentive powers were doubtlessly possessed by the ancient Mexicans, but the codices prevented errors creeping in. Recourse was also made to

the codices at all times for divinatory purposes in connection with the Tonalamatl. In addition codices were doubtlessly used in the schools of instruction and in the training of initiates into the priesthood. Nevertheless, the number of persons who could interpret the texts was probably quite small.

Visitors to Mexico should be warned that there are a number of fraudulent hieroglyphic codices and paintings on deer hide in existence. Some of these are skillful fakes. *Caveat emptor.*

CHAPTER VIII

TEMPLES AND TOMBS

Archæological Wealth. Pyramid of Sun at Teotihuacan. Construction. Stone Carving. Pyramid of Quetzalcoatl. Xochicalco. Tajin. Circular Structures. Monte Alban. Possible Maya Influences. Mitla. The Palaces. Mosaic Stone Decoration. Tepoztlan Temple. Teopanzolco. Frescoes at Tizatlan, Teotihuacan and Mitla. Idols. Braziers. Quauhxicalli. Pottery. "Yokes." "Palmas." Funerary Urns. Tombs. Mexican Cultures and Their Neighbors. Theories of Atlantis and Egyptian Origins. American Cultures Overwhelmingly Native.

IN the previous chapters, with the partial exception of Chapter I, we have looked at ancient Mexico mainly through the eyes of Spanish writers of the sixteenth and seventeenth centuries. In this chapter we shall depend for our information largely on the supplementary evidence supplied by the finds of archæologists. Archæologists are the rag-pickers of ancient history. If the rubbish heap is that of a rich culture, the pickings are good, and the information imparted by the relationship of the objects one to another correspondingly important. Mexico is in this respect a rich country, although climatic conditions have caused the destruction of all textile, wood and basketry objects. Nevertheless little scientific work has so far been done outside of the Valley of Mexico, and for large areas we are dependent on the little information supplied by the undocumented finds of the old-time pot-hunters and grave-robbers—a species unfortunately not yet extinct.

In this chapter little attention will be paid to the various cultural areas into which Mexico has been divided. These divisions are merely temporary, and there is no doubt that with more archæological field work the simple pattern of Mexican cultures evolved around the beginning of this century will have to be radically altered. Areas, off-handedly assigned to a single civilization, will doubtlessly be found to house half a dozen local cultures each divisible into time periods.

Almost without exception all Mexican religious structures were placed on the summits of raised mounds, frequently in the form of a truncated four-sided pyramid. The most famous structure now surviving in Mexico is undoubtedly the Pyramid of the Sun at Teotihuacan, about twenty-eight miles northeast of Mexico City. Actually there is no evidence that this structure was devoted to solar worship. Indeed, there is no reason to believe that much attention was paid to the sun by the ancient inhabitants of Teotihuacan, and the name has been given to the structure since the Spanish conquest. In general principles this pyramid doesn't differ radically from all other pyramids erected in central Mexico from the earliest known example, probably that of Cuicuilco, to the latest Aztec structure of the late fifteenth century. Accordingly in describing this pyramid we are describing all ancient Mexican pyramids, allowing for differences in size, ornamentation and minor elements, such as arrangement of stairways and the number of terraces.

The pyramid of the sun has a present height of no less than 215 feet, and covers an area of over half a million feet with a frontage of 716 feet. Actually the present measurements are considerably less than those of the original structure, for about two decades ago a thick layer was removed from the whole surface of the pyramid in the course of some very unscientific excavations.

The structure is divided into five sections by setbacks in the sloping walls. These form narrow terraces, around which processions of priests, presumably, once wended their way in ceremonial ascents or descents. On the front, which is the west side, one ascends by means of an enormous stairway, which is double between the second and third terraces. Actually there is at the present time a small pyramid immediately in front of the west face, which may have been a later addition. As a result of its presence the staircase forks at this point, one spur descending to the north, the other to the south of the obstruction. In passing it may be noted that the forking at the base and the short double section are features not met with in most stairways.

The summit of the pyramid is a level platform originally covered with a plaster floor, and measuring about 130 feet square. On this formerly stood the temple, but as this was made of perishable materials, no traces of it survive.

Of the exterior facing of the pyramid nothing now remains, thanks to the vandalism to which reference



Courtesy of Field Museum, Chicago

PLATE XXXI. SMALL STONE MASK AND SQUATTING FIGURE, VERA CRUZ

has already been made. There is some reason to believe the finish was similar to that of most Teotihuacan substructures. That is, the upper section of each sloping wall was decorated with a sunken perpendicular panel running the whole length of the face and enclosed in a raised panel. (Plate III.) Apparently these decorative panels, which in turn were frequently ornamented with simple circles and other geometric designs, were added to the structure after the construction of the sloping sides. As they were not firmly welded into the sloping walls, their eventual collapse was assured.

A tunnel driven into the interior of the pyramidal core brought to light many pottery figurine heads of the Early Teotihuacan period. As no typical Middle or Late Teotihuacan heads were recovered, it is fairly certain that the work of constructing this enormous pile started during the Early Teotihuacan period at about the same time as the Cuicuilco pyramid was erected. It appears, however, that the original structure was subsequently enlarged during the height of the Teotihuacan period.

The first task in erecting a pyramid of this type was to clear the turf off the ground. Next, apparently, rough walls were erected to enclose the area to be covered by the structure. These were made of stone, set in mud or adobe, or cut blocks of tepetate conglomerate, and the corners were not bonded. The space enclosed by these walls was then filled with a mass of stone, tepetate conglomerate and earth. In Maya structures this rubble

mass was not thrown in haphazard, but independent rectangular sections were built up to the required height until the whole area was thus filled. A somewhat similar method was followed in ancient Peru, and it has been conjectured that each section was a task for a gang. Although there is no specific information as to the Teotihuacan practice, it is probable that here too this method was employed.

The sloping walls of the outer face were next added. An inclined bank, roughly of the required shape, was made of small stones. The exterior slope of this bank was then covered with a three-inch layer of concrete. Thin slabs of andesite were laid horizontally so that their butts penetrated into the core and their outer faces projected beyond the concrete layer. These slabs carried the weight of the sunken panels and their frames. The exterior was finally covered with a wash of lime, on which frescoes were usually painted.

The summits of structures were finished off in a similar manner. Over the loose interior fill a layer of closely packed small stones or tepetate blocks was placed. Over this again was laid concrete with a lime or plaster finish.

Well-cut stone was rarely employed in Mexican structures except for decorative purposes, for an even finish could be easily obtained by a concrete or plaster surface over undressed stone or roughly finished blocks of tepetate. Nevertheless, in some structures well-carved stone ornaments served as secondary ornamen-

tation. One of the most frequent forms of this kind of decoration was the carving of balustrades in the form of feathered serpents. These are very common on Aztec pyramids, but also occur in the Teotihuacan period. The bodies of the serpents served as the balustrades, the tails were in relief at the top of the stairway, while the enormous heads projected at the base.

The pyramid of Quetzalcoatl at Teotihuacan possibly supplies a prototype of this decoration. Here serpent heads are set at intervals the whole length of each balustrade. Each head projects from a feather ruffle, and the open jaws display a terrifying set of non-ophidian teeth. The framed panels below each terrace also display these same feathered serpent heads. They alternate with conventionalized masks of the rain god Tlaloc. Scattered along the panels are also small representations of shells in low relief, while the lower aprons are adorned with full-length snakes also in low relief. (Plate III and frontispiece.)

This temple of Quetzalcoatl was subsequently covered by another pyramid placed immediately in front of it. This second structure, which is clearly of later date, is without relief decoration. It forms the centre of a large group misnamed the citadel, consisting of a hollow square flanked on all four sides by fifteen smaller pyramids of the same type. There are four of these on all flanks except that behind, that is the west side, there are only three.

Another profusely decorated pyramid is that of

Xochicalco. This is situated in the State of Morelos, not far from Cuernavaca. Here again the feathered serpent is the principal ornament. The balustrades carry a decoration of serpent scales, while the sides of the squat pyramid are ornamented with a series of writhing feathered serpents in low relief. The designs are more realistic than those of the temple of Quetzalcoatl at Teotihuacan. On the west, or front side, there is a feathered serpent on each side of the stairway. Owing to lack of space each serpent has its head turned back looking at its tail, which is curled forward so that the projecting feathers are touching the out-thrust bifurcated tongue. The effect is very striking. (Plate XXVII.)

In addition to the plumed serpents there are a number of human figures set into the design. These are seated cross-legged. The heads, which are in profile, are crowned with huge plumed snake head-dresses. They are strangely reminiscent of Maya sculpture, but the representations of the serpents and certain interspersed glyphs are certainly not Maya. The whole structure was originally painted in various colors. Green and vermillion predominate, but red, blue, and black also occur. There are also the remains of a stone temple on the summit of the pyramid.

Probably the structure was erected by a Nahua people who had been affected by influences emanating from southern Mexico. It has been suggested that the structure was built around the year A.D. 1100. This would place it as belonging to a pre-Aztec horizon, and make

it contemporaneous with late middle Teotihuacan, the period which probably witnessed the erection of the Quetzalcoatl pyramid at Teotihuacan.

In the Puebla-Vera Cruz frontier area occurs a peculiar type of architecture remarkable for the use of niches set in the pyramidal walls as decorative features. Until a few years ago the only known example of this type of architecture was the famous pyramid at Tajin, near Papantla, in the State of Vera Cruz. (Plate XXVII.) In recent years Mr. Enrique Palacios, the well-known Mexican archæologist, has discovered a similar type of decoration on several pyramidal structures at Yohualichan, near Cuetzalan, and in the same general region. The Tajin pyramid is in Totonacan linguistic territory, while the ruins of Yohualichan are in an area where a Nahuatl language is spoken. This type of architecture is generally ascribed to the Totonacs, but there is no actual evidence for this.

The niches, together with the rest of the pyramidal facings, are constructed of well-cut neatly finished blocks of stone, affording a marked contrast to the rough finish of pyramids in the Valley of Mexico when stripped of their concrete or stucco veneer. In many cases the slabs at the back of the niches retain traces of red paint over the stucco. Red paint is also found elsewhere, suggesting that the whole structure was once painted in this color. The pyramid of Tajin has seven set-backs. The total number of niches is a multiple of seven; the cornices are formed by seven slabs; finally

the spaces between the niches are occupied by seven little seat-like arrangements. This strange use of the number seven must be more than a coincidence. Perhaps the explanation lies in the structure having been dedicated to Chicomecoatl, or a local variant of this goddess, whose name means "Seven Snake."

The greatest pyramidal structure in ancient Mexico was that of Quetzalcoatl at Cholula. The base of this has been calculated at about a dozen yards short of 500 yards. The pyramid, which has sadly lost its original form, is now crowned by a Christian church. It presents no feature of interest other than its enormous size, which in ground area exceeds that of any other pyramid in the whole world, Egypt not excepted.

Of peculiar interest is the circular temple at Calixtlahuaca in the Toluca Valley, west of the Valley of Mexico. Excavation of this strange five-story structure is now being carried out by archæologists of the Mexican Ministry of Education. A stairway on the east side ascends steeply to the summit, on which, presumably, once stood a circular wooden temple. Round temples were once common in ancient Mexico, but this is the only one known to exist at the present time outside of the Maya area, and differs from the four known from Maya land in possessing no less than five terraces.

These circular temples were dedicated to Quetzalcoatl in his rôle of Eecatl, the wind god. Early Spanish writers hint that circular structures were more suitable for the worship of the wind god, for the absence

of corners moderated the gusts one often meets on turning the corner of a building. Presumably the wind god was therefore less hindered in his wanderings when he encountered a circular wall, and for that reason inclined to assume a more benevolent attitude toward his worshippers. The early pyramid at Cuicuilco is also roughly circular, but there is no evidence that it was connected with the worship of Quetzalcoatl-Eecatl.

The Toluca Valley, in which the round structure is situated, was the home of the Matlatzincas (the deer people), but it was subdued by the Aztecs in the course of their imperialistic expansion. Settlements of Aztecs were then placed in the valley to act as a kind of garrison and prevent any uprising by the Matlatzincas. Information at present available does not indicate what people was responsible for the erection of the wind-god temple. Pottery found in the structure will eventually give the answer to this question. It is known, however, that the building had been enlarged at some period, following a fairly general Mexican-Maya custom.

Monte Alban in the State of Oaxaca is now famous for the wealth recently extracted from its tombs by Mr. Caso and other trained Mexican archæologists, but the site has been of archæological importance for many years for quite different reasons. Here pyramids and mounds are arranged in an orderly manner more reminiscent of part of the Maya area than of central Mexico. The ruins consist of a vast system of level courts forming terraces in the mountain-side and bordered by

a great series of pyramids. The original side of the mountain has been so excavated in ancient times to form these terraces and courts that practically no part of the terrain remained unworked.

At Teotihuacan there is a certain rather vague arrangement of structures, but for a close parallel to the Monte Alban courts one must turn to the Peten District of the Maya area. The masonry of Monte Alban is poorly dressed, but this is probably due to the absence of easily worked stone in the immediate vicinity. Monte Alban lies in Zapotecan linguistic territory, but close to the territory inhabited by the Mixtecs. The recent finds show that the city must have been used right up to the time of the conquest, for the contents of the tombs clearly date from the late fifteenth century, but the site is at the same time of great antiquity. There is no definite evidence as to the race that originally inhabited the city.

The presence of stela-like stones inscribed with hieroglyphs in cartouches is suggestive of Maya influences. In addition the number five is written on these Monte Alban monuments with a bar in the Maya style instead of with five dots, as was the Aztec custom. These similarities, while suggesting possible Maya influences, do not necessarily imply a Maya invasion; culture can, and usually does, travel without being carried by immigrants or invaders.

At the nearby site of Mitla are the so-called Palaces with their mosaic decorations. Mitla was the an-

cient holy place of the Zapotecs, to whom it was known as Yoopaa, for Mitla is a corruption of the Aztec name Mictlan, which means the underworld. The Zapotecan name seems to carry the same meaning, for the word means the resting place, carrying the idea by related words of a burial place. The name seems to have been derived from the fact that, according to local belief, the entrance to the underworld was situated here. Mitla was conquered by the Aztecs in the year 1494 according to one native source, but Aztec domination probably never sat very heavily on the Zapotecs. One or two military colonies were planted in their territory, and an annual tribute was exacted, but the Zapotecs continued to govern themselves under their own ruling chiefs until the arrival of the Spaniards.

The ruins of Mitla do not show the orderly arrangement characteristic of the site of Monte Alban. Here are to be seen the remains of four palace buildings and two pyramidal structures with adjacent minor mounds, but the different groups are placed haphazard with no particular arrangement one to another, although the structures forming a group are arranged around quadrangular courts.

The best-preserved building is Palace II, as it is called by archaeologists. (Plates XXVIII and XXIX.) It consists of a long hall running the whole length of the south side. This is the front, which is approached by a wide flight of steps. One enters this hall through a triple doorway divided by two short sections of wall

and bridged by heavy stone lintels, each carved from a single stone. Immediately behind the hall is a small enclosed court, flanked by rooms on all sides. There are five of these rooms, of which two are on the east side. A doorway from the main hall communicates with the southernmost of the two eastern rooms. This in turn, like the other four rooms, has a doorway leading into the interior court. All five rooms are very narrow, having only about half the breadth of the main hall.

The roofs were made of beams of wood passing across the breadth of the rooms. Over these were laid smaller pieces of wood at right angles; these in turn were covered with a layer of small stones finished off with a covering of cement. As the main hall was too wide to be spanned by single beams, six stone pillars were placed in line down the centre of the room. On these rested long beams placed end to end so that they ran the whole length of the hall. On these in turn rested transversal beams so that two spanned the breadth.

The walls of the whole building are decorated inside and out with elaborate mosaic patterns. These are without exception of geometric origin, and can clearly be traced to textile designs. Frets or grecques attached to a step design form the majority of the patterns, no less than eight different combinations or variations of these two designs occurring together. (Plate XXVIII.) Another frequent motif consists of step designs arranged in a diamond pattern with a small cross in the



Courtesy of Field Museum, Chicago

PLATE XXXII. CHOLULA POLYCHROME BOWL

centre. Sometimes a second diamond is placed inside the first.

Each stone forming part of one of the decorative panels carries a small part of the design in relief. These blocks, of which no less than 80,000 were used in the designs of the walls of the court alone, were cut and carved with the required design before being fitted into their positions on the walls. Each stone is supplied with a tenoned back which was set into the rubble mass of the interior of the walls. The whole, therefore, forms an example of mosaic work on a gigantic scale, but with the same technique employed as in the designing of mosaic decorations on turquoise shields or other minor *objets d'art*.

The whole structure, as was apparently the case with all Mexican and Maya structures, was covered with stucco. Every few years a new coat of stucco was given every building, and as the old was not usually scraped off, an amazing number of coats are frequently found on such parts of a building as have been well sheltered from the elements. In the background of the decorative panels of the building in question traces of red may be seen. It is possible that the whole building was originally painted red, or red may have been used as a background to set off the cream-white of the mosaic decorations. The Mexicans and Mayas shared with the Greeks the custom of painting all their sculptures. Although this is barbarous taste in our eyes, one must not forget that the beautiful stonework of the Gothic ca-

thedrals of England was similarly covered with layers of limewash in mediæval times.

According to Father Burgoa, who relied on documents as well as traditions current among the Indians during his time (seventeenth century), these buildings were used as residences of the high priests and nobility. The following passage is taken from the translation given by Seler:

"One of the rooms above ground was the palace of the high priest, where he sat and slept, for the apartment offered room and opportunity for everything. The throne was like a high cushion with a high back to lean against, all of tiger skin, stuffed entirely with delicate feathers or with fine grass which was used for this purpose. The other seats were smaller, even when the king came to visit him. The authority of this devilish priest was so great that there was no one who dared to cross the court, and to avoid this the other three chambers had doors in the rear, through which even the kings entered. . . .

"The second chamber above ground was that of the priests and the assistants of the high priests. The third was that of the king when he came. The fourth was that of the other chieftains and captains. . . . All the rooms were clean and well furnished with mats. It was not the custom to sleep on bedsteads, however great a lord might be. They used very tastefully braided mats, which were spread on the floor, and soft skins of animals killed in the hunt; deer, rabbits, armadillos, etc.,

and also birds, which they killed with snares or arrows."

This description hardly fits Palace II, for there are no traces of a back entrance, and the rooms are six in number, counting the hall, not four, as Father Burgoa says. The description probably applies to one of the other palace groups now in ruins. Father Burgoa also speaks of a range of rooms beneath. Nothing corresponding to this is known at Mitla, although under one of the buildings was found a cruciform burial structure of a type to be described later.

The term "palace" is used archæologically to describe multiple-room structures such as these, although there is little evidence that they were used as residences. The word is used to differentiate them from the obvious temple structures perched on the tops of pyramids, the palaces, in contrast, standing only on low substructures.

Typical pyramidal substructures have already been described, but it is more difficult to describe the actual temple structures since few of these have survived. Undoubtedly the majority were made of wood and thatch, and for that reason have long since perished.

Near Tepoztlan in the District of Cuernavaca are to be seen the remains of a temple crowning a steep pyramid. This, apparently, was dedicated to Tepoztecatl, one of the pulque gods. One enters the temple through a doorway divided into three entrances by two stucco-covered pillars. A low stucco-covered bench adjoins the

side and back walls of the temple on the inside. Two short walls, projecting from each lateral wall, divide the temple proper into an outer and an inner chamber. These short walls carry decorations in stucco. Against the back wall of the inner chamber stood an idol, believed to have been that of Tepoztecatl, but this was thrown down and smashed by a Christian priest in 1592. The fragments were built into a nearby church.

On the face of the bench are a number of crude hieroglyphs. It has lately been claimed that these show Maya influences, but the evidence for this is very weak, and the identification extremely dubious.

Very similar are the two temples of Teopanzolco recently excavated by Mexican archæologists. These are situated close to Cuernavaca station. Two flights of parallel stairs on the west side lead to two temples at the summit. One of these is similar to that of Tepoztlan in possessing an inner chamber and a bench against the back wall. The second lacks the division into two chambers, but has a bench at the back and square pillars at each corner, possibly to support the roof. The outside of the walls are decorated with small rather crude animal heads. The pyramidal substructure is enclosed by another and later pyramid. This later addition is not so high as the original structure.

Some six years ago archæologists of the Ministry of Education uncovered very important ruins on the top of a natural hill at Tizatlan in the State of Tlaxcala. A flight of steps leads to a much-destroyed temple fac-

ing a little east of north. A stucco-covered bench runs along the back wall of the temple, while two pairs of semicircular columns serve to mark off a kind of inner sanctuary, and presumably once carried roof beams. Immediately in front of these are two low oblong altars with their long axis running north and south. The sides of these, except where they touch the columns, are covered with frescoes in a remarkable state of preservation.

The front of one shows Tezcatlipoca with his tell-tale leg (p. 157) facing Mictlantecutli, the death god, while the sides of the altar have a pattern of alternating death heads, hands, hearts, and what may be shields. The second altar has on the front two complicated mythical scenes with a lower border of geometric patterns of grecques and steps similar to those at Mitla. The sides carry a series of conventionalized signs with a similar border at the base. The colors, which still retain their original brightness, comprise blue, gray, black, yellow, white, pink, red and brown. Some of these colors are shown in several shades, and the whole presents an exceptionally vivid picture. The treatment is very close to that of the codices, except that the different scenes are shown with painted backgrounds, while in the codices the background is almost invariably unpainted.

A number of very beautiful frescoes have also been uncovered at Teotihuacan. A scene on the walls of the so-called Temple of Agriculture at this site is of par-

ticular interest. This showed, for it has unfortunately been destroyed, every-day functions in connection with the temple services. Priests are shown approaching with offerings of copal or some similar substance placed between two bowls placed lip to lip, while on top of the altar flames and clouds of copal smoke belch forth. Other priests approach with offerings of birds and other objects and women prepare maize bread. Above there is a representation of a divination ceremony in which note is made of how tortillas or something of that nature fall when tossed onto a mat. As in the codices there is no scale, distant figures being shown as the same size as those in the foreground, but distance is shown by placing those farthest away at the top, and those supposed to be nearest the observer at the base.

Other frescoes at Teotihuacan show priests with plumed head-dresses facing each other; the scrolls, representing speech, make a particularly well-balanced composition, while the portraiture is superior to that usually found in the codices. At Mitla, again, are found frescoes representing recognizable deities and others, presumably, of local origin. A form of negative painting is employed, for the figures in white stand out against a red background. Black is also sparingly used as face marks and occasional details of costumes. Unfortunately only the upper sections of these frescoes survive. Part of the building, in which some of them were situated, had been turned into a stable, and others looked down from their walls on a hog sty. This situa-

tion has been remedied since the present Anthropological Department of the Ministry of Education undertook its energetic campaign to protect the ancient monuments of Mexico.

Richly embroidered cotton curtains hung across the temple doorways, and in temples of stone little light can have penetrated when these were in position. Unfortunately there is no good account of the contents of a Mexican temple in ancient times, although casual references enable us to reconstruct the furniture with fair accuracy. The principal object was naturally the idol of the god to whom the temple was dedicated.

Idols were made of stone or wood. As in the codices, each had its distinguishing mark by which it could be recognized by the humbler devotees. The ordinary worshipper would recognize the god as easily as the good Catholic recognizes Saint Andrew by his X-shaped cross or Saint Peter by his keys. The attributes of the idols were the same as those of the gods depicted in the codices. The idols were also dressed in clothing and given head-dresses which also helped to differentiate them. Naturally the clothing has perished, and consequently gods are frequently not recognizable without them. A few, however, can be easily recognized. Xochipilli idols, for example, almost always carry the comb-like crest typical of this god and Tlaloc heads are shown with the goggle eyes and tusks in the mouths. (Plate XVIII.)

Occasionally idols in the temples were made of pot-

tery or even obsidian, and the household gods appear to have, usually, been made of pottery. The features of the patron god of a temple were also portrayed on many of the utensils used in his service, one can assume. Thus masks of Tlaloc were presumably used in his temple; and the pottery vessels with his head in relief were supposedly employed in his worship.

Of ceremonial importance were the copal braziers and incense burners. Sometimes the Aztecs used portable braziers consisting of a bowl in which the copal was burned, and to this was attached a long handle. This was frequently in the shape of a snake, the body forming the arm of the handle and the head reposing in the the priest's hand. Usually these arms were hollow and contained a clay pellet which rattled when the brazier was moved. A vessel of this type may be seen in the hand of the sun god in Plate XX. Other braziers of the Aztec period have two lugs by which they could be suspended from the ceiling of a temple. One might conjecture that these held the sacred fire.

Another type has an elaborate lid. This depicts the bust of a god complete with ear-plugs and other paraphernalia, and, like those described above, was made of pottery, but there were also stone braziers. Of these the most characteristic are braziers representing the squatting fire god. He is invariably shown as a wrinkled old man owing to his name of the Old Old God. The top of his head-dress is hollowed out to form a flat-bottomed bowl. Braziers of this type vary greatly in size,



Courtesy of Field Museum, Chicago

PLATE XXXIII. JADE ORNAMENTS FROM OAXACA

but all can, apparently, be safely attributed to the Teotihuacan horizon.

An important utensil of Aztec temples was the *Quauhxicalli* or receptacle into which the hearts and blood of sacrificed victims were cast after first being held aloft to the sun. The name literally means "Eagle gourd," and it played an important part in Aztec ritual. After the sacrifice, a priest dipped a feather-tipped reed in the blood that had been poured into it, and proceeded to asperge the different idols with this ghastly liquid. This is the reason why the Spanish conquerors found the temple walls so thickly caked with blood (p. 167).

The quauhxicalli were often beautifully carved with intricate designs, and were usually in the shapes of deep, flat-based bowls. It has been conjectured that certain stone vessels in the shapes of jaguars and with hollows in the centres served the same purpose. From Duran's account we also get the impression that the term was applied to the famous calendar stone. This is more than likely, since this was closely connected with sun worship, as were the quauhxicalli. It will be remembered that the eagle was the name of the Aztec warrior order, whose patron was the sun, and also that the jaguar was the name of a similar order under the patronage of the sun god. In fact both these animals were closely connected with sun worship.

Carved stone boxes are occasionally discovered, and it is a fair assumption that these were used in the tem-

ples, particularly as they are often carved with religious symbolism. A beautiful example in Field Museum has the four day signs, on which the years started, carved on the inside, one sign being carved on each of the four sides. The base of this box has a feathered serpent with saurian features carved in low relief on the base. Sometimes these boxes carry carvings that show different gods piercing their ears in sacrifice, a feature occasionally met with on the quauhxicalli. This would suggest that the boxes also served as blood receptacles.

The sacrificial block seems always to have been placed outside the temple, doubtlessly in order that the public might witness the sacrificial ceremonies from below (p. 217). On the terraces, to judge by Maya practice, stood supports in which the butts of standard masts stood. These standards or flags, again according to Maya custom, were in all probability constructed of featherwork, and fluttered horizontally to the ground.

From statements of the early writers we know that pottery vessels were used in religious services to hold the offerings of food and precious objects. There is no information as to what vessels were used for this purpose, but it is a fair assumption that the best was employed in the service of the gods. To go into full details of the principal types of pottery manufactured in Mexico would be outside the scope of this book, but a few outstanding types will be discussed below.

The finest ware produced at Azcapotzalco was a rare development resembling the well-known cloisonné.

This was produced by cutting away the background so as to leave the required design in low relief and flush with the untreated surface of the rest of the vessel. The deep background was then filled flush with the rest of the surface with color, or merely painted. Vessels of this type are very rare, and it is possible they were imported from the region of Zacatecas, where they also occur. Typical Teotihuacan vessels of the pre-Aztec period are monochrome, either of a polished brown or black. Frequently these vessels are supplied with three small teat legs or three legs like flat blocks of wood standing on end. Sometimes the outer faces of these latter feet are carved. Vases covered with beautiful designs in painted stucco are also found at Teotihuacan.

Undoubtedly the most beautiful pottery produced was that of Cholula. This ware, which is of late date, often reaches six or seven colors. The surface is very highly burnished, but there is no glaze, such a practice being unknown in the New World. (Plates XVIII and XXXII.) The only exception is the plumbate ware already described (p. 133), and in this case the semi-glaze was accidental. Intricate designs are found on this best Cholulan ware, which with local variations are also found in Tlaxcala. The decoration is frequently reminiscent of the paintings on the codices, but the high burnish brings out the deep richness of the brown, orange, and chocolate shades to an extent unparalleled in the codices.

Tripod dishes are particularly typical of this ware,

the legs being frequently shaped as animal or human heads, but many other shapes are met with. In the nearby Tlaxcalan territory tall cylindrical jars with flaring bases are most typical. These also carry elaborate polychrome designs, sometimes of a somewhat grim nature, skull and cross-bones being a by no means rare motif.

The best pottery from northwest Oaxaca is very similar to that of the Cholulans, but the shapes are different. A shape peculiar to this region is provided with a wide pouring lip, resembling our old-fashioned cream jugs. In addition to the colors employed at Cholula, this Oaxaca polychrome ware includes a rich purple, probably obtained from a shell fish (p. 79). Other typical shapes are shown on Plate XXX. One vessel shown has the three feet shaped as snakes. This ware has been attributed to the Mixtecs, but this association is premature in view of the lack of excavation in this region.

In the vicinity of the Panuco River on the northeast coast of Mexico are found peculiar spouted vessels resembling our teapots. These are generally assigned to the Huastec culture because this people was inhabiting the region in which they are found at the time of the conquest. The designs are painted in black on a white background.

The best Aztec pottery is divisible into two main classes. In the first the ware is covered with a fine lightly polished orange-yellow slip. Simple geometric

or highly conventionalized designs are painted in black, usually in delicate thin lines. The commonest shape is the tripod bowl, the legs being either square or thin circular supports tapering to a point. Often the bases of these vessels are scored with crisscross lines. These, it is believed, served for grinding chili peppers. Miniature vessels of this same ware are frequently found; some of these, apparently, served as supports for spindles when cotton was being spun, while others may have been used to hold ointments and precious liquids.

The second class of fine ware manufactured by the Aztecs was covered with a highly burnished deep-red slip, which was often decorated with simple designs in black, and less frequently in black and white. The commonest shape resembles a diablo toy, consisting of a cone-shaped cup standing on a flaring base which resembles a second, but inverted, cone. Low wide-mouthed bowls of this ware are also frequently found, and the designs, when they occur, are frequently very decorative. This ware was taken over by the Aztecs from their predecessors in the Valley of Mexico.

Each area has its distinctive shapes, the greatest variety occurring in the Jalisco and Michoacan areas of the west and the Vera Cruz District in the southeast.

Typical of this last area are two peculiar forms of stone sculpture. The first of these groups is composed of the famous "yokes," about which there has been so much controversy. In shape these are like a capital U, averaging a depth from the open mouth to the curve

at the base of about eighteen inches. Some are plain, but the majority are elaborately carved both inside and out. The ends, too, usually carry designs. Examples of these peculiar carvings have been found over a wide area, one having been found as far away as El Salvador, and a fragment of another in the great Maya city of Palenque. These were, apparently, trade pieces.

Theories put forward as to their use vary from the suggestion that they were used to hold down the sacrificial victims or as yokes for slaves to their having served as supports to hold the deceased in an upright position in the grave. None of these explanations are satisfactory. Recently a burial has been described in which the body lay full length with the head placed inside the yoke, which lay flat. The open ends of the yoke reached to the person's shoulders. Joyce has suggested that the yokes represent the gaping jaws of the earth monster ready to receive the dead, and this is a feasible suggestion since such scenes are frequently depicted in the codices. In any case only persons of considerable importance can have been honored with such elaborate carvings. The yokes are generally attributed to the Totonacan civilization, although this attribution is based solely on the fact that they are generally found in Totonacan territory. It is certain that the burials are not Nahua, for among the Nahua cremation was the general practice except in certain cases already noted (p. 49).

In this same area are found other remarkable stone

carvings generally known by the Spanish name of "Palmas." The purpose which these served is equally mysterious, for no satisfactory function, which they might have filled, has ever been suggested. Whereas the yokes are almost invariably of a well-polished stone, usually diorite, the palmas are unpolished and made of a volcanic rock. The designs are of great variety; some are carved as birds, human figures, or human heads (Plate I), whereas others represent featherwork or carry simple conventionalized patterns.

With few exceptions they are carved on all four sides except for a small strip close to the base of the rear side. Almost without exception the base is hollowed out from one side to the other, giving it a cusp-like support. This suggests that the stones were placed on horizontal poles, and that there was a small support fixed to the pole, against which the bottom of the back rested. As the backs are usually carved, except for this small section at the base, it is clear the palmas did not stand on poles on the fronts of structures. It is possible, however, that they were placed on a cross-bar over the entrance to a temple courtyard, or, conceivably, on the cross-bar of some processional litter.

Very striking are the ornate funerary urns of pottery found in parts of Oaxaca, especially in the vicinity of Monte Alban. These consist of a box-like base, from the back of which rises a tapering funnel, while, masking it, a grotesque figure is seated in front. (Plate XXX.) These funerary urns vary greatly in size, some reach-

ing a height of over two feet, but all, apparently, were originally covered with paint. In most cases this seems to have been a simple red wash, but sometimes as many as four colors are found painted on a single urn. Most of the urns represent anthropomorphic deities, but a group are modelled as jaguars. The human type usually wears a shoulder cape, loin cloth, ornaments, such as ear-plugs and breast pendants, and an elaborate head-dress of feathers with a glyph in the centre.

Most of the figures represent a grotesque deity with an elongated nose and the bifurcated tongue of a snake. The face, which closely resembles the early masks on a primitive pyramid at the Maya site of Uaxactun, undoubtedly represents a rain deity. Others represent a youthful deity who is clearly a maize god, as he is often shown with ears of maize in his hands or in his head-dress.

These urns are usually found in groups of fives, placed above, or in front of, tombs. Occasionally they have been found fixed in a long shallow niche above the entrance to the tomb. It has been suggested that they represent deities who will guide the deceased on his journey to the next world. This does not seem very probable, as the figures do not seem to represent any deities associated with the underworld.

The tombs with which these urns are associated are long vaults with roofs made of flat stone slabs and a regular doorway with stone lintel and sealed with large stones. Sometimes the walls are provided with niches,

in which the bones of the deceased, or at least a part of them, are frequently placed. In one case the walls of the tomb had been covered with frescoes, but these, unfortunately, were in too bad a state of preservation to be copied. In another case the lintel of the doorway was carved with a hieroglyphic inscription.

Very frequently the bones of the dead persons, for several corpses are sometimes found in one tomb, had been painted red or vermilion. This naturally implies a secondary burial. Possibly the bodies were allowed to rot, and, after complete decomposition, were cleaned, painted, and placed in the tombs. The bones of a dog, painted a rose color, were also found in one grave, suggesting that the belief was also held in this region that a dog helped the soul of the deceased in his journey to the next world.

In one case the skeleton of an individual had been placed immediately above the roof of the tomb. This may have been the body of some slave sacrificed to accompany the soul of his late master to the next world, for, naturally, only persons of rank were buried in these imposing vaults. In one case decapitated heads were found in a mound containing one of these tombs. Each was covered with an inverted dish. Heads treated in a similar manner and lacking a body have been found in different parts of the Maya area, notably British Honduras and the Peten area, and it has been conjectured that they were the heads of sacrificial victims.

Drain pipes of pottery are found in some of the

mounds covering these tombs. They consist of short sections of tubing, tapering slightly at one end, so that the narrow end fits into the wider mouth of the adjacent tube, the juncture being made water-tight by the addition of cement. These drains, which, apparently, served to carry the water from the centre of the mound, in one case reach a length of thirty-six feet. In this case the drain carried the water from the floor supporting a tomb. Underground piping of this type has not been noted from any other part of middle America.

At Mitla and in the near vicinity are found even more remarkable burial vaults decorated with carved mosaic designs on the walls similar to those of the Mitla "palaces" already described. These tombs are built in the shape of crosses roofed with flat stone roof slabs and with a doorway at the end of one of the arms. The most elaborate of these is situated under one of the Mitla temples. The doorway, which was below the court in front of the temple, had apparently been concealed in ancient times, but during the colonial period the entrance appears to have been discovered, and the tomb robbed of its contents. The length from the end of the north arm to the extremity of the south arm is slightly more than forty feet, and the length between the extremes of the east and west arms is thirty-four feet. The arms are each slightly over five feet wide and about six and a half feet high. At the intersection of the four arms of the cross the roof is supported by a single round column. In a number of cases a short flight

of steps leads down to the entrance to the tomb, for the floor of the tomb is in all known cases below ground level.

The fact that these tombs are in the shape of a cross does not imply any connection with Christianity, for the cross was a common symbol in ancient middle America, where it was primarily a sign for the four world directions and their guardians. It is probable that these tombs were built in this shape in honor of the four lords of the world directions. Sometimes the centre of the world was considered to be a fifth world direction, and in this connection it is interesting to recall that the funerary urns outside the other type of tomb, already described, were placed in groups of fives. It is true that the figures are often the same, whereas one would expect to find five different deities, one representing each direction, but all can be shown to be connected with agricultural gods, if one considers the beliefs of the neighboring Mayas. The long-nosed rain gods were associated with the world directions. They are sometimes called *Balaam*, which is the Maya word for jaguar, and it will be remembered that some of the Oaxaca funerary urns are in the shape of jaguars. Finally these rain gods of the world directions are closely associated with the crops, and, as already noticed, some of the figures on the urns carry ears of corn. The evidence is not conclusive, but is, at least, suggestive.

Before bringing this chapter to a close it would be well to include a short survey of the relations of Mexi-

can civilization to those of its neighbors. As one passes northward from the centre of Mexico, there is a marked falling off in culture. The Pueblo cultures of the southwestern United States have clearly been influenced by cultural emanations from Mexico, although there are a few local developments. Culture spends its force as it travels. Districts which are far removed from the centre of culture and difficult of access receive fewer cultural impulses from the point of radiation than do those areas which are close to the point of diffusion or, although distant, are geographically or physically brought close to the centre by the absence of barriers. The cultural stream overlaps its banks, depositing the rich mud of its progress in the most accessible points.

It would be a mistake to attribute to Mexican influences all features which Pueblo culture holds in common with Mexico. Many of these features undoubtedly date back to an early period before the rise of the individualized Mexican civilizations. These same features can also be found in the cultural areas of South America.

Mexican influences made themselves felt more strongly in the lower Mississippi Valley, where such middle-American features as human sacrifice and pyramidal structures occurred. The reason why these features are found in the far-away Mississippi Valley while they are absent in the more contiguous Pueblo area is not far to seek. Access to the Pueblo district was difficult, whereas by following the easy route that skirts

the Gulf of Mexico, influences could easily pass from the Panuco region into the lower Mississippi Valley. Nevertheless, these cultures to the north were mere recipients, not cultural donors.

To the south of Mexico lies the Maya area. Mention of Maya civilization has been made many times in these pages, but it is doubtful if much in Mexican culture can be attributed directly to the Maya. Maya civilization was a late specialized development, and there is little reason to credit the hoary antiquity usually attributed to it.

It is very probable that the cultures of Mexico and those of Central America, including the Maya, are offshoots of an earlier civilization that arose at about the time agriculture was developing in the new world. This civilization, if we can accord it such rank, must have comprised many independent peoples with their local languages and local arts, but united in sharing their cultural attainments and fairly uniform religious concepts based on agriculture. This does not imply that the same type of vessel was made in all parts in which this culture was found, nor that the same deity was worshipped with exactly the same rites and under the same name all over the area, but rather that the resemblances were far greater than the local differences. Naturally the most isolated parts diverged most strongly from the mean. Hence we find that the Maya and Mexican civilizations, assuming for the sake of clarity that all Mexican civilizations had the same origin, developed

along fairly similar lines. Early divergences would in some cases be accentuated, but contacts between the different branches would close up the gaps in other cases. Resemblances might have been closer had it not been for the influx of the hordes of Nahuatl-speaking peoples from the north. They naturally imparted fresh ideas and religious concepts. Deities such as Huitzilopochtli and Tezcatlipoca are quite foreign to Maya ideas, but these are precisely the deities which were the patrons of the invaders from the north. The old gods, such as the Tlalocs or the god of the planet Venus, might pass any day as Maya gods with a change of name. Like Judith O'Grady and the colonel's lady, they are the same under the skin.

When one turns to Peru, the resemblances are found to be less close. This is due to the great distance between the two areas. Contact was practically lost at an early period, and there was no consequent check on divergences. Peru specialized on metallurgy, Central America on mathematics. A concrete discovery, such as the working of copper, was able to bridge the gap, and appears in middle America at a much later date. Mathematics, lacking the impulse of utility, was impeded in the counter flow. That contact between the pre-specialized cultures reached as far as Peru is shown by distribution of all the early agricultural plants, as well as pottery making, agricultural deities, and even myths.

A backwash at a later time carried other agricultural plants of South American domestication back into mid-

dle America, possibly at the same time as the northward spread of metals. In the centuries immediately preceding the arrival of the Spaniards, Peru seemed to have made more contributions to cultural advance than did Central America, for there are more inventions found only in Peru than are found only in the latter region. Colombia also seems to have made its solid contribution to advancement, but the other areas, including the United States, merely donated buttons to the cultural offertory plate. As in communities, so in nations; a few lead, the rest are pulled along, lagging far behind.

In recent years there has been a revival of the old wild theories that claim Atlantis or a sunken continent of the Pacific as the source of American civilization. These theories are put forward by cranks or persons with no real knowledge of aboriginal American culture. On a few superficial resemblances between Old and New World cultures these fantastic schemes are reared. They are contradicted by geologists and qualified archæologists without exception. Nothing is too impossible to be put forward by the proponents of this rubbish. It has even been claimed that the Greek alphabet is a Maya hymn recounting the submergence of Atlantis! "The Star-Spangled Banner" might just as well have been substituted for the Greek alphabet. One could probably produce from it by the same methods a Maya hymn every bit as plausible.

It has also been claimed that American civilization

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has been derived from Egypt via the Pacific. Against this theory is the fact that every cultivated plant in the New World, with three possible exceptions, was unknown in the Old World prior to the time of Columbus. The exceptions are cotton, gourds, and sweet potatoes. In the case of cotton the varieties of Old and New World origin are different, and in the case of the third the question is not yet settled as to whether or not the sweet potato was known outside of America before 1492. Now had the civilization of America been derived from Egypt via the Pacific, it is inconceivable that the invaders would not have introduced with them the plants of the Old World. Not only were the staples of the Old World, such as wheat, barley, yams, bananas, and rice totally unknown in America, but also a very long period would have been required to domesticate the wild plants of the New World, and the invaders and their descendants would have reverted to barbarism long before the first crops were gathered, allowing leisure for the building up of a new civilization. Even had this been possible, the evidence of the maize plant itself refutes its feasibility. With the exception of rice, a plant requiring entirely different methods, all Old World grasses are sown broadcast. Maize also is derived from a grass. Had it been first cultivated in the same way as the people of the Old World cultivated their other grasses, it would have been sown broadcast. It would then have developed like other grasses into a short, multiple-stemmed plant, but its present form

clearly shows that each plant was sown individually with an adequate space between it and its neighbor, enabling it to develop one massive and high stalk.

Metal working is definitely absent from all periods of middle-American history prior to three or four centuries before the conquest. If these civilizers had come from Egypt or Asia, it is to be presumed that they would have brought with them the knowledge of working metals. Similarly the wheel was totally unknown in the New World. If the invaders were able to introduce so many religious features, as are claimed by them, it is strange that they did not utilize their knowledge of the wheel. Furthermore, no Asiatic artifact has ever been found in the New World under conditions that would preclude its having been introduced in the post-conquest period. All such finds must be very carefully investigated, as the following clearly shows. Some years ago an indubitable Maya flint was dredged out of the Thames River near London. It was subsequently found to have come from a spot where ships from British Honduras were accustomed to dump ballast. In a second case large numbers of Egyptian scarabs were found on a farm in Scotland. It was subsequently discovered that the farmer had given the field a dressing of manure. This manure, it was learned, had come from Egypt, and there is no doubt that the scarabs were scooped up with the manure in Egypt. These two illustrations serve to show the need of very careful investigation of all such finds.

Certain middle-American sculptures and paintings of Maya and Aztec origin are cited as clear proofs of Asiatic influences, since they appear to portray elephants. In most cases these supposed elephants' trunks are the snouts of the long-nosed rain gods, and are clearly of ophidian origin, but in one or two cases the trunks are certainly very elephantine. The explanation is probably to be found, not in an Asiatic prototype, but in a half-forgotten tradition of the mastodon. Recent discoveries have now shown that the mastodon lingered on for many centuries as a contemporary of man in the New World, and there is some evidence that in Ecuador one was slain by man not more than 3000 years ago, as the polychrome pottery associated with it attests. This massive animal would naturally leave a tremendous impression on the minds of its human contemporaries, and would in all probability be accorded worship, like other important fauna.

Clearly American civilization was not imported wholesale from Asia, but there is a certain case to be answered for Pacific influences in South America. The question is complex and too involved to be stated here. Suffice it to say that the evidence is very far from being conclusive at the present time. It is possible that the argument will never be definitely settled, but it is the duty of all Americanists to keep an open mind. Whatever may be the outcome, there will never be any serious question that the great bulk of native culture of the New World should be stamped "Made in America."

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